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THE
NATURALIST's POCKET
MAGAZINE ;
OR,
COMPLEAT CABINET
OF THE
CURIOSITIES AND BEAUTIES
OF
NATURE.
CONTAINING,
ELEGANT COLOURED PRINTS
OF
BIRDS,
FISHES,
FLOWERS, || INSECTS,
QUADRUPEDS,
SHELLS,
AND OTHER NATURAL PRODUCTION.
WITH
DESCRIPTIONS.

VOL. IV.

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NATURALIST'S POCKET
MAGAZINE.

50

COMPLETE GUIDE

to the

CURIOSITIES AND BEAUTIES

of

NATURE

containing

LEGANT COLORFUL PLATES

of

the most interesting objects

in the animal and mineral

kingdoms, with their

and elegant illustrations

of the

descriptions

of the

plants

and animals

of the

whole world.

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SYRIAN GOAT.



Published December 1st MDCCLXV by George C. & J. N. L. London.

SYRIAN GOAT.

THOUGH this very singular and most curious species of the Goat is well known to naturalists, all the information respecting it, found in the works of our best writers, is extremely trifling. Even Pennant, who gives us two figures, offers not the smallest particular description of either, and comprises his general account of the Syrian Goat in the few following lines.

“ These animals,” says he, “ are plentiful in the East, and supply Aleppo with milk. Their ears are of a vast length, hanging down like those of Hounds, from one to two feet long. Sometimes they are so troublesome, that the owners cut off one, to enable the animal to feed with more ease. The horns are black, and short.”

He adds, that “ the same species is also found among the Kirghisian Tartars, and sometimes brought down to Astracan.”

SYRIAN GOAT.

This is all the information afforded to us by Pennant on the subject: and we may observe, that what he says, relative to the cutting off one ear, might quite as well have been omitted; as it is palpably absurd, and an undoubted misrepresentation of the actual fact.

Mr. Kerr, in his translation of Linnæus, mentions this circumstance with more plausibility: “the ears,” says he, “are of an enormous length, and sometimes need to be cut off, to allow the animal to graze.” This, if at all necessary, would only be half effected by cutting off a single ear, as related by Pennant. Buffon makes no mention of the matter; which, it is probable, he did not at all believe. Indeed, like other naturalists, he takes but little notice of the Syrian Goat.

This animal, however, is the *Capra Mammatica*, of Linnæus; the *Capra Syriaca*, of Bisson; the *Capra Indica*, and *Capra Mammatica*, or rather *Syriaca*, of Gesner, Johnston, and Ray; the *Goat with Long Hanging Ears*, of Prosper Alpinus and Aldrovandus; the

the Geyssen with Hanging Ears, of Rauwolf; the Mambrina, or Syrian Goat, of Buffon; and the Syrian Goat, of Pennant, Russel, Zimmerman, and Nieuhoff.

It inhabits Syria, India, Persia, and other parts of the East. Its horns are short, black, and transversely wrinkled: those of the male bend much backwards, and are divericated and bent upwards at the ends: those of the female take a half turn, pointing forwards, close to the head. The animal is somewhat larger than the Common Goat, and appears to partake of its general habits.

Buffon says, that the Levant or Mambrina Goat, with long pendulous ears, is only a variety of the Goat of Angora; which has also pendulous ears, though they are not so long. He remarks, that the former is called the Mambrina Goat, because it is found on Mount Mambrina in Syria. Both these Goats, he adds, were known to the ancients; but they did not separate them from the common species.

This variety of the Mambrina, or Syrian Goat,

Goat, according to Buffon, is more diffused than the Goat of Angora; for we find Goats with long ears in Egypt, and in the East Indies, as well as in Syria. They yield a great deal of fine milk, which the natives of the East prefer to that of the Cow or Buffalo.

In the *Nouveau Voyage* of the Sieur Luiller, it is remarked that, at Pondicherry, there are Kids which differ much from our's: they have large pendulous ears, and their aspect is mean and silly; but their flesh, though bad, is sometimes eaten.

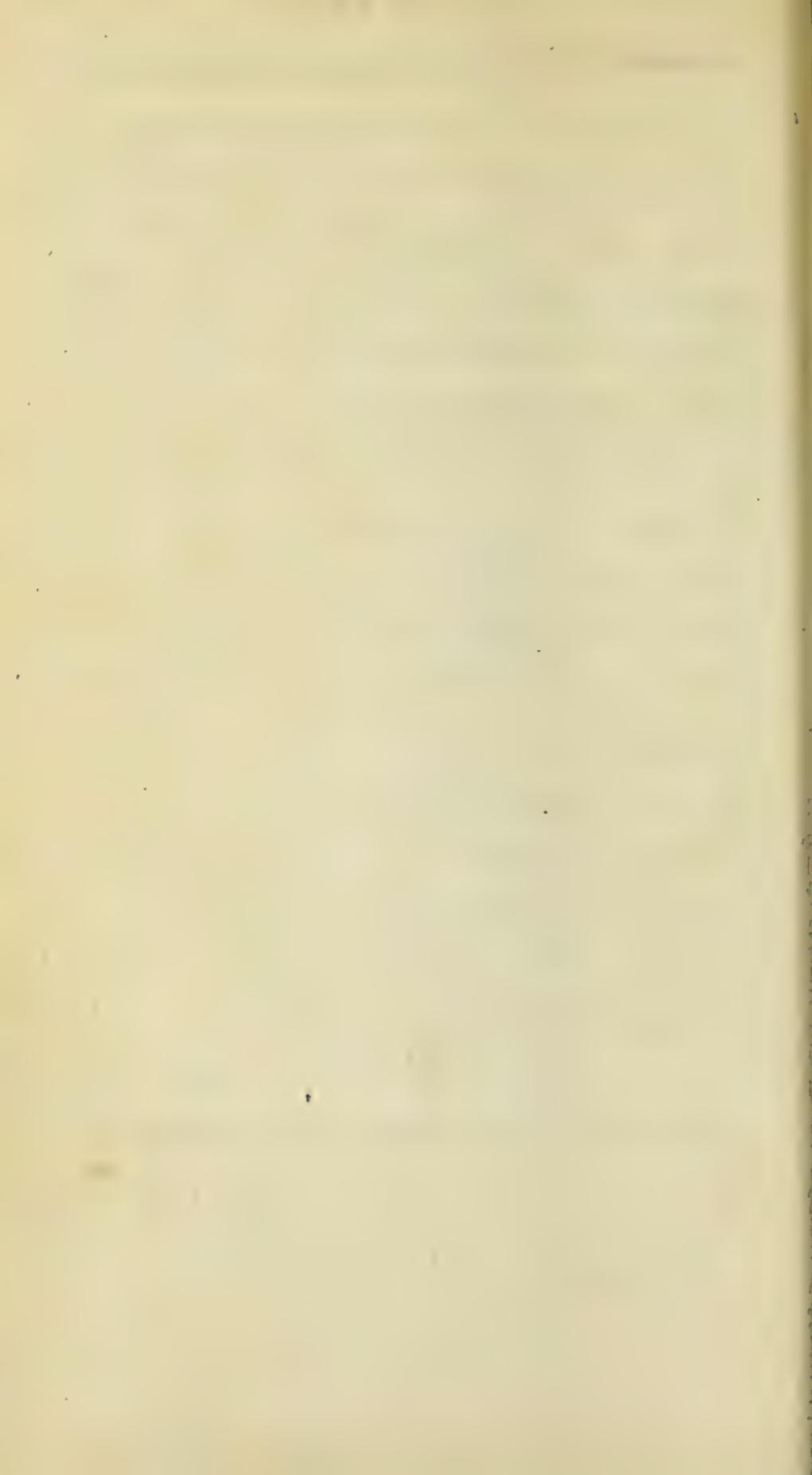
Dr. Russel, in his *Natural History of Aleppo*, informs us that "the Goats are remarkable for the length of their ears. The size of the animal," he adds, "is somewhat larger than our's; but their ears are often a foot long, and broad in proportion. They are chiefly kept for their milk, of which they yield no inconsiderable quantity; and it is sweet, and well tasted."

Dr. Goldsmith, who calls this animal, "the Assyrian Goat of Gesner;" after observing that
it

it is somewhat larger than our's, with ears almost hanging down to the ground, and broad in proportion ; asserts that the horns, on the contrary, are not above two inches and a half long, black, and bending a little backwards. He adds, that the hair is of a Fox colour ; and that, under the throat, there are two excrescences, like the gills of a Cock.

“ These animals,” says Goldsmith, “ are chiefly kept round Aleppo, for the sake of their milk. They are driven through the streets, and their milk is sold to the inhabitants as they pass along.”

The hair, which appears to be long, thick, and glossy, like that of most other Syrian animals, is said to be manufactured into very beautiful camblets.







LONG-TAILED DUCK OF NEWFOUNDLAND.

— Drawn and colored by Maria Sibylla Merian.

LONG-TAILED DUCK OF NEW- FOUNDLAND.

THIS Newfoundland Long-Tailed Duck of Edwards, is the *Anas Glacialis*, of Linnæus and Gmelin; the Swallow-Tailed Sheldrake, of Ray and Willughby; and the Long-Tailed Duck from Newfoundland, of Brisson, Buffon, and most other naturalists.

It is described by Edwards to be about the size of our Wigeon; but, for greater certainty, he gives the particular dimensions of the bird here delineated from his original.

" Its principal measures are as follow: from bill point to the corners of the mouth, a little more than one inch and a half; the wing, when closed, is eight inches long; the legs, from the knees downwards, are not quite an inch and a half; the middle toe is a little above two inches; and the middle feathers of the tail are near eight inches long.

" The bill is black; except a red bar across
the

the upper mandible, between the nostrils and the tip, deeply pectinated on it's edges, and shaped as in most other Ducks. The fore part and sides of the head, and the sides of the neck, are of a light brown, inclining to flesh colour. The hind part of the head and neck, the throat, and beginning of the breast, are white. It has a large black spot on each side of the head, or beginning of the neck. The back, and covert-feathers of the wings, are of a glossy black. The greater quills, and the four longest or middle feathers of the tail, are black or dusky. The inner quills which fall next the back are of a dark reddish brown colour. The insides of the wings are wholly of a dusky brown colour. The breast is of a dusky black, which colour joins itself in the upper part by a ring with the black on the back. The sides under the wings, the thighs, belly, and covert-feathers beneath the tail, are white; as are the outer feathers of the tail, on each side, with their upper covert-feathers. From the shoulder spring plats of long, narrow, white feathers, which extend themselves between the back and wings on each side, almost to the beginning of the tail. The legs and toes

LONG-TAILED DUCK OF NEWFOUNDLAND.

toes are of a dusky red. The webs of the feet are black. It has a little fin, or lateral web, on the inside of each of the inner toes, and on the under sides of its small backward toes."

This Duck, Edwards also informs us, was taken on the fishing banks of Newfoundland; and, in 1754, he figured it on the copper-plate immediately from nature. He adds, "I am doubtful whether this bird is not of the same species with the Long-Tailed Duck from Hudson's Bay, figured in my History of Birds. On comparison, I think it possible that they may be male and female; their measures and the figures of their bills and feet, agreeing very nearly. But," he concludes, "I submit this opinion to the farther enquiry of naturalists. I believe mine to be the first figure and description given of this Duck."

Buffon, under his article "Long-Tailed Duck from Newfoundland," observes that "the coloured figure of Edwards represents those parts brown which, in the Duck called Miclon, are black, in our Planches Enluminées;

yet

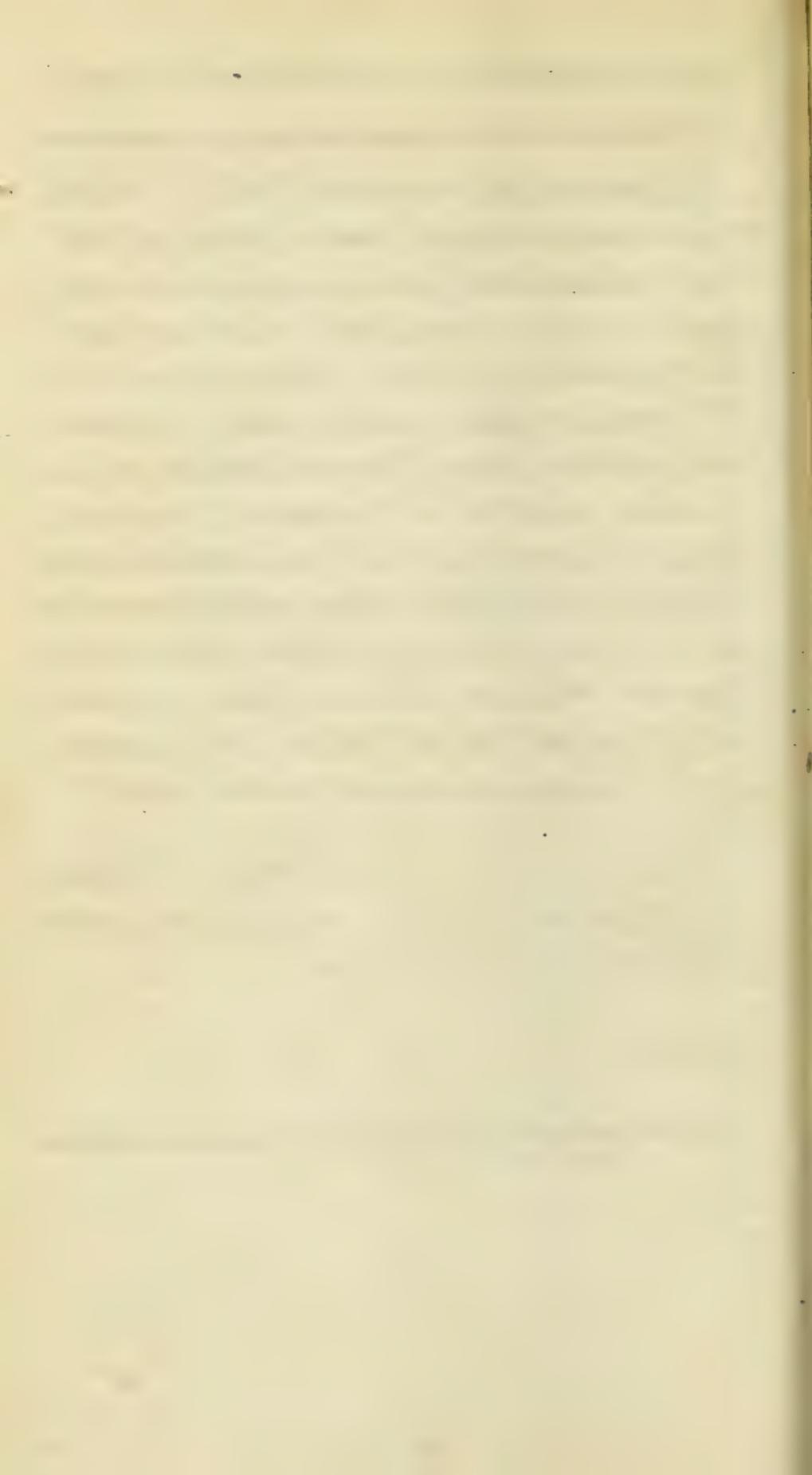
yet we may perceive that both these birds are the same, by the two long shafts which project from the tail, and by the fine disposition of the colours. White covers the head, and the neck, as far as the top of the breast and back; there is only a band of orange fulvous which descends from the eyes on both sides of the neck; the belly, and also two bunches of long, narrow feathers, lying between the back and the wing, are of the same white with the head and the neck; the rest of the plumage is black, as well as the bill; the legs are of a blackish red, and a small edging of membrane may be observed running along the margin of the inner toe, and below the little hind-toe. The length of the two shafts of the tail increases the total bulk of this Duck, yet it is scarcely equal to a Common Duck. Mr. Edwards suspects," adds Buffon, "with every probability, that his Long-Tailed Duck from Hudson's Bay, is the female of this. The size, the figure, and even the plumage, are nearly the same; only the back of the latter is less variegated with white and black, and the plumage is on the whole browner.

" This

LONG-TAILED DUCK OF NEWFOUNDLAND.

"This subject," concludes Buffon, "which appears to be a female, was caught at Hudson's Bay, and the other was killed in Newfoundland; and, as the same species is recognized in the Havelda of the Icelanders, and of Wormius, we may conclude that, like many others of the genus, it is an inhabitant of the remotest countries of the north. It occurs, also, in the north-east of Asia; for it is the Sawki of the Kamtschadales, which they also name Kiangitch, or Aangitch; that is, the Deacon: because they find that this Duck sings like a Russian Deacon. So, it seems, that a Russian Deacon sings like a Duck!"

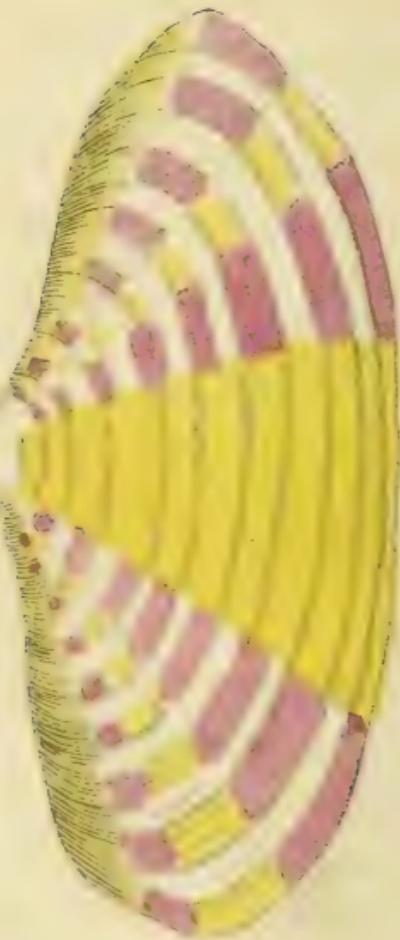
This Long-Tailed Duck breeds in the remotest parts of the north; and visits our shores only in the severest winters.





RED & YELLOW STRAW-BRAN.

Unblended Yellow Straw Bran & Red Straw, most



RED AND YELLOW SUN-BEAM.

THIS elegant and very beautiful shell, which is figured of the natural size, is a bivalve, and belongs to the family of *Tellinæ*, or *Tellens*.

The characteristics of the *Tellens*, according to Da Costa, are these: the shells are more broad than long; they are rather flat; and the hinge has two teeth set close together.

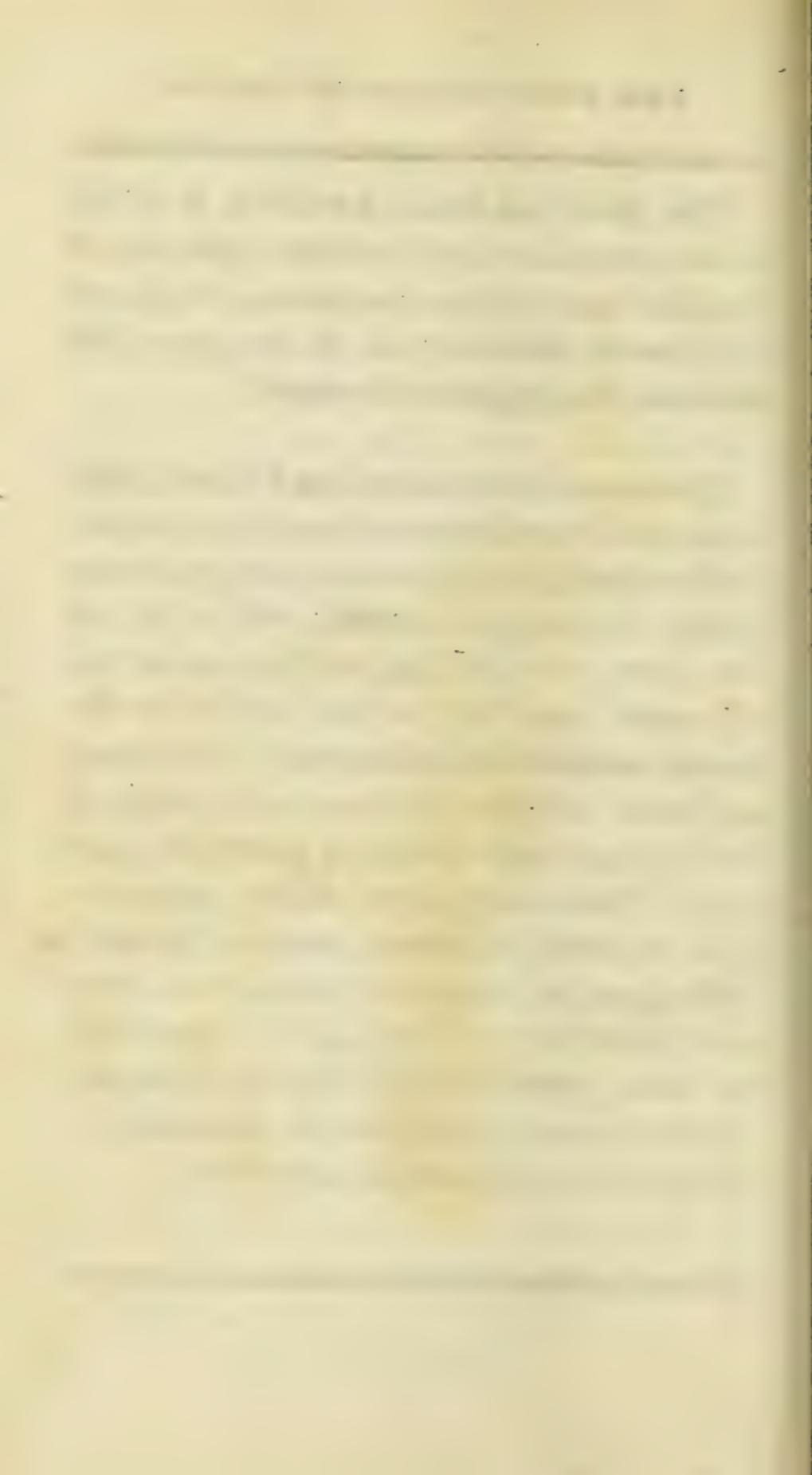
In this family, there are two genera: viz. the *Tellinæ*, properly so called, being shells with similar sides, the beak and hinge of which are central; and the *Cunei*, or shells with dissimilar or unequal sides, the beak and hinge of which are placed either at one end, or nearly so. The species of the first genus, or *Tellinæ*, in which the present subject is comprehended, are far from being numerous. The rank held by these shells, in the writings of systematic authors, is as follows: Lister, who defines them "shells shaped like wedges," places them after the *Pinnæ*; and Woodward, who makes them a genus, says, that "they have few

few teeth on the hinge, and are oblong shells, or with lengthened sides :" on which Da Costa remarks, " he might have expressed himself better, by saying they were broad shells." Rumphius, Gaultieri, Meuschen, and Linnæus, have all a genus which they call *Tellina*. Davila, also, has a genus which he denominates *Tellina*; but he defines them very inaccurately, and includes the *Solens*. Argenville, too, is reproached by Da Costa, as even ranking them among the Muscles.

It is not very often that shells receive names so expressive of their appearance, as those among which is found the present object of our attention. They are called, by the French, " *Rayons du Soleil*," or " *Sun-Beams* :" an appellation obviously derived from their exactly representing the rays which the setting sun darts through the clouds, enlarging their dimensions in proportion as they appear distant from the sun. This effect is still more striking in the Blue Sun-Beam, where the cœrulean firmament is represented, than even in this beautiful shell, which is called the Red, or the Red and Yellow Sun-Beam.

The Blue Sun-Beam, however, is of the Cunei genus, having dissimilar sides; while the Red and Yellow Sun-Beam, which we have exactly delineated, is of the genus first described, having both sides equal.

The colours are more or less brilliant in different shells: and, not unfrequently, the yellow is seen degenerated into a very pale straw colour, or even white itself: while the red also glows, occasionally, in all the varied and evanescent hues which we find depicted on the clouds; sometimes blushing with the deepest and most brilliant crimson, and sometimes barely tinged with a scarcely perceptible pale pink. These observations, indeed, are applicable to shells in general, which differ astonishingly in the richness of their colours, especially when they are not originally taken with the living animal; and, in bivalves, it may be remarked, once for all, that the under shell is always pale, and often quite colourless.







STRIPED ANTELOPE.

Engraved by W. H. Worrell, from a drawing by J. G. Keulemans.

STRIPED ANTELOPE.

THIS fine animal is the Antelope *Strepsiceros*, of Linnæus, Pallas, Caius, and Gesner; the *Cervus Capensis*, or Cape Deer, in the Leverian Museum; the Wild Goat of Kolben; the Condoma, or Striped Antelope, of Buffon; and the Striped Antelope, of Pennant, and other naturalists.

The account which Buffon gives of this animal is as follows—"The Marquis De Marigny," says he, "who never loses an opportunity of encouraging arts and sciences, shewed me, in his museum, the head of this animal; which, at first sight, I took to be that of a large *Bubalus*. It resembles the head of our largest Stags: but, instead of solid horns, like those of the Stag, it had two large hollow horns with a ridge like those of the He-Goat, and a double flexion like those of the Antelopes. In searching the Royal Museum, I found two horns which belonged to this animal: the first had been brought from the King's Wardrobe, without

without any title or name; the second I had from M. Baurhis, Commissary of the Navy, under the name of the Condoma of the Cape of Good Hope; which name I have adopted, because the animal has not hitherto been described or denominated. From the length, thickness, and especially the double flexion, of the horns, the Condoma makes a near approach to the *Strepsiceros* of Caius. The figure, and even all the dimensions of the horns, are almost perfectly the same. From this correspondence in the size and figure of the head and horns, we may presume that the Condoma and *Strepsiceros* of Caius, are the same animal; especially when the following reflections are attended to—1. Caius, it is obvious, was deceived, when he made this animal the *Strepsiceros* of the ancients; for the *Strepsiceros* of the ancients is unquestionably the Antelope, whose head is very different from that of the Stag: now Caius tells us, that the head of the *Strepsiceros* resembled that of the Stag; and, therefore, it could not be the *Strepsiceros* of the ancients. 2. Caius's animal, like the Condoma, had thick horns, above three feet long, covered with rugosities, instead of rings
or

STRIPED ANTELOPE.

or tubercles; but the horns of the Strepsiceros of the ancients, or Antelope, are much thinner and shorter, having both rings and tubercles.

3. Though the horns of the Condoma in the Museum of the Marquis De Marigny, as well as those which were brought from the King's Wardrobe, had been polished by friction, it is easy to perceive that they never had rings. This fact is farther demonstrated by the horn sent to me by M. Baurhis, which had never been touched; and yet it had only rugosities, like the He-Goat, and no rings, like the Antelope: now Caius himself tells us, that the horns of his Strepsiceros had rugosities only; hence this Strepsiceros is not that of the ancients, but the animal of which we are here treating, and which possesses all the characters that Caius attributes to his.

"In examining the writings of travellers," adds Buffon, "we have found nothing which approaches so near to the genuine idea of this animal, which is so remarkable for it's size, and particularly the largeness of it's horns, as the quadruped mentioned by Kolben, under the denomination of the Wild Goat of the Cape of Good Hope.

" This

STRIPED ANTELOPE.

" This Goat," says he, " which has received no name from the Hottentots, and which I have called the Wild Goat, is remarkable in many respects. It is of the size of a large Stag. Its head is very beautiful; and adorned with two smooth horns, which are bended and pointed: they are three feet in length, and their extremities are two feet asunder."

" These characters," concludes Buffon, " seem to correspond exactly with the animal under consideration. But, having the head only, we cannot be certain that the rest of Kolben's description will apply to it with equal precision. Future observations alone can determine the truth of what now appears to be extremely probable."

This future observation seems to have confirmed the fact; for the animal is fully described by Pennant, and appears compleatly to correspond.

The length of the Striped Antelope is nine feet; its height four. The body is long and slender; the legs are slim. The horns are of a dusky

STRIPED ANTELOPE.

dusky colour, and naturally wrinkled, though such as are brought to Europe have generally been highly polished. They are about four feet long; and very close at their bases, but above two feet and a half distant at their points; and have two spiral screw-like turns. The female has no horns. In the upper jaw is a hard horny substance, disposed in ridges. The face is brown, marked with two white lines proceeding from the corner of each eye, and uniting above the nose. The colour in general is of a reddish cast, mixed with grey. From the tail, along the top of the back, to the shoulders, is a white stripe: from this are seven others; four pointing towards the thighs, and three towards the belly. "But," says Pennant, "I have observed them to vary in number of stripes." Indeed, in his own figure, which we have copied, there are no less than ten of these stripes. On the upper part of the neck is a short mane: beneath the neck, from the throat to the breast, are some long hairs hanging down. The breast, and belly, are grey. The tail which is two feet long, is brown above, white beneath, and black at the end.

It

STRIPED ANTELOPE.

It inhabits the Cape of Good Hope, where it is called Coedoes, and is said to leap to a most astonishing height.

Pennant remarks, that this name, Coedoes —perverted to that of Coudous—has been applied by Buffon to the Indian Antelope.

It is evident that Buffon, in his descriptions of these animals, has been greatly at a loss. The fact is, that he frequently publishes bold conjectures. On the present occasion, all his actual knowledge seems to have been drawn from a view and comparison of the horns alone.





GUINEA SPARROW.

Published ... by Harrison Gray O'Neil, New York

GUINEA SPARROW.

BUFFON observes, that this bird, which he calls the Red-Headed Parroquet, is known to bird-fanciers under the name of the Guinea Sparrow: Edwards, and Albin, as well as Buffon, give both names, but the two former prefix the epithet Little. It is, in fact, the *Psittacus Pullarius*, or *Æthiopian Parrot*, of Linnæus; the *Psittacus Pusillus Æthiopicus*, of Ray; the Guinea Parroquet, of Brisson; and the Red-Headed Guinea Parroquet, of Latham.

Bosman says, that though these Parroquets are called Guinea Sparrows, it would not be easy to assign the reason, since the Common Sparrows are also very abundant on the Gold Coast. It may, perhaps, have arisen from their being so prodigiously numerous as to injure the crops of corn, like our Common Sparrow: added to the circumstances of being nearly as small as that bird; and unable to speak,

speak, like the Parrot tribes in general, which they certainly more resemble.

Buffon says, that this species seems to be dispersed over almost all the southern climates in the ancient continent: for, he adds, on the authority of Clusius, it is found in Ethiopia; in the East Indies, on that of Albin; and, in the Island of Java, as asserted by Salerne. He disclaims, however, Seba's Little American Parrot, which would place it on the new continent; and observes that "many persons very improperly call it the Brasilian Sparrow, for it is not a native of America." Edwards says, that Albin had no authority for asserting that it came from the East Indies; and adds that, from all he can learn, he is certain that it is a native of Africa, and not found at all in America.

It is brought into Europe, on account of the beauty of it's plumage, it's tameness, and it's gentle disposition; for it cannot be taught to speak, and has only a disagreeable scream. Nine out of ten are supposed to die on their passage; yet, when properly fed, and kept in pairs,

pairs, they live to a considerable age in our climates. They lay, sometimes, in Europe, but the eggs seldom hatch. Buffon mentions an instance, of two young Parroquets hatched in the month of January, in a room without fire, but which the cold soon killed. He thinks that, with due care, these birds might be propagated in the domestic state. They are so affectionate when coupled, that if one dies, the other grows melancholy, and scarcely ever survives. They are extremely attentive to each other: the male sits beside the female, and disgorges into her bill, and is uneasy if she be a moment out of his sight. "Thus," adds Buffon, "they sweeten their captivity, by love, and gentle manners."

The description of this bird, as given by Edwards, is as follows. "The bill is of an orange colour, hooked at the point of the upper mandible; but has no angle on it's edges, as is common in most of the Parrot kind. The nostrils are not in a skin falling over the bill: but between the feathers of the forehead and the bill, which is encompassed all round, both above and below, with bright red or scarlet feathers,

feathers, that take up all the fore part of the head, or what may be termed the face. The eyes appear all black, having no coloured irides, as in most Parrots; and are surrounded with narrow spaces of bare skin, of a light ash-colour. The hinder part of the head, neck, back, and upper sides of the wings, are of a fine green colour. The throat, breast, belly, and covert-feathers under the tail, are of a lighter green, and more inclining to yellow than the feathers of the upper side. The insides of the quills of the wings are of a dark ash-colour, as are their tips outwardly; the lesser covert-feathers within the wing are black; the ridge of the wing, about the joint, is blue. The rump is covered with fine blue feathers. The covert-feathers on the upper side of the tail are green; the two middle feathers of the tail are also green: the remaining ten, five on each side, are first, near their bottoms, or roots, green; then follows a transverse bar, of a fine red or scarlet colour; after that, a narrower bar of black; and lastly, the tips of the feathers are green. The covert-feathers of the tail, above and beneath, are so long, that the colours of the tail are not seen,

unless

unless the tail be a little spread: they are rather shortened in the figure, to shew the beauty of the tail. The legs, feet, and claws, in this bird, were of a dusky colour, like those of other Parrakeets. This was a cock bird: in the hens, the head is of a paler red; and the ridge of the wing about the joint is of a yellow colour."

Willughby, who has given a long description of this bird from Clusius, says that it is a native of Ethiopia. Buffon also remarks, that "Clusius has very distinctly described this species, under the name of *Psittacus Minimus*." He adds, that "Edwards, Brisson, and Linnæus, have confounded it with the Little American Parrot painted with various colours, of Seba, But," continues Buffon, "it is undoubtedly a different bird: for Seba says, that his Parrot has not only a collar of fine sky-blue, and a tail magnificently tinged with a mixture of five colours, viz. blue, yellow, red, green, and deep green; but that its voice and song are pleasant, and that it easily learns to speak. It is evident," proceeds Buffon, "that all these attributes belong not to the Red-Headed

GUINEA SPARROW.

Red-Headed Parroquet: perhaps the bird, which Seba saw alive, forms a sixth species of the Short-Tailed Parroquets of the new continent.

"A variety," concludes he, "or perhaps a contiguous species, may be found in the bird described by Edwards under the denomination of the Smallest Green and Red Parroquet; which differs in no respect from the preceding, except that it's rump is red."



CAT-FISH.



With the original figure drawn from life by *John Edward Gray*, *Philadelphus*

CAT-FISH.

THE Cat Fish, or Greater Cat Fish, as it is called by Edwards, is the *Catulus Major Vulgaris*, of Willughby ; and the *Chætodon*, or Cat Fish, of Linnæus, and most other naturalists.

This fish belongs to the order of prickly-finned thoracic fishes. Edwards calls it a cartilaginous fish; but Goldsmith, following the improved system of Mr. Gouan, ranks it with what, he says, are more properly denominated the spinous classes of fishes.

In the annexed figure, this fish, which grows frequently to a very large size, and is thought by many to be a species of the Shark, is represented as it appears while coming from the egg, or spawn, in size, form, and colour: the navel-string, by which the embryo animal is originally attached, being apparent beneath the throat or fore-part of the fish, though the shell, or covering, in general, still adheres.

This

This egg, which is of a horny substance, and of a red brown colour, appears shaped like a purse, and is flattish and edged on it's sides. In the subject delineated by Edwards, and which we have exactly copied, there was a whitish coralline incrustation on the outside, from which it is conjectured to have floated for some time in the sea.

Edwards thinks, that he has seen the Cat-Fish, which he takes to be a lesser species of the Shark, caught in the British Channel; where, he adds, our seamen call it the Sea-Dog. The skin of it, he observes, seems to be what our joiners, &c. use to smooth and finish their work. The upper side, or back, is of a brownish colour, variegated crosswise with broken irregular bars of a dark blackish colour. The belly, or under side, is white. It has lateral lines from the eyes to the tail, though they are not very visible. The nostrils have slits from them into the mouth; and five slits on each side of the head form the gills. It has two single fins on the back, one behind the other. On the belly, there are two pairs of fins; and centrally, between the two fins which compose

the hindermost pair, the vent is singularly situated. Besides these, there is a single fin on it's under side, near the tail. The tail-fin is of very particular make; seeming to unite with a long and apparently distinct fin, which extends a considerable way down the body on the under side. All the fins are marked or spotted with large dusky coloured streaks or spots.

The skin of the Cat-Fish is sensibly rough to the touch, in even the smallest fish, on it's immediate exclusion from the egg. The teeth, which are very sharp, consist of several rows, like those of the Shark.

As it is found on the British coasts, and likewise at the Cape of Good Hope, we may conclude it to be a general inhabitant of the seas both in the temperate and torrid zones.

That from which Edwards drew this figure, was brought with several other small fish from the Cape of Good Hope, preserved in spirits of wine. Among these, is a somewhat smaller Cat-Fish, with part of the egg, appearing like a bladder,

CAT-FISH.

a bladder, hanging from the navel-string, and all the rest of the body quite unincumbered.

The specific character of the Chætodon, or Cat-Fish, is as follows: the body is oblong; the head is small; the teeth are slender, and bending; the fin covering the gills has five or six spines; and the fins of the back and anus are scaly.

The Greatest Cat-Fish is said to differ from this, in being of an ash-colour, in having larger and fewer spots, a larger and thicker snout, and nostrils at a considerable distance from the mouth.





JAPAN CAT.

JAPAN CAT.

THIS beautiful animal appears to be but little known by naturalists. We find not the smallest mention of it in Buffon's work, nor in any edition of Linnæus.

It is, however, the Chat Sauvage Indien, or Indian Wild Cat, of Vosmaer: and Pennant calls it, seemingly on the sole authority of this writer, the Japan Cat; a name which we have adopted, together with the excellent figure.

The description of the Japan Cat, as collected from Vosmaer and Pennant, is as follows.

It is about the size of the Common Domestic Cat, and has upright pointed ears. The colour of the face, and lower part of the neck, is whitish. The breast, and lower belly, are a clear grey. The body, in general, is part yellow and clear grey, mixed with black disposed in transverse rays. Along the back, quite to the

the tail, there is a broad band of black: it also extends over the upper part of the tail; the lower part of which is semi-annulated with black and grey. The tail is ten inches and a half long.

The cry of this animal is said to resemble the mewing of a great Cat; and its manners are described as being peculiarly gentle.

Pennant remarks that, “by Mr. Vosmaer’s epithet, it seems a native of Japan.” He neglects, however, to quote this epithet of Vosmaer; and gives his appellation, simply, as the Chat Sauvage Indien.”





JACAMAR.

Collected with the assistance of Mr. J. G. Keulemans.

JACAMACIRI.

THIS fine bird is the *Alcedo Gabula*, of Linnæus and Gmelin; the *Gabula*, of Brisson; the *Gabula Viridis*, and *Green Jacamar*, of Latham; the *Cupreous Jacamar*, of Pennant; and the *Jacamar*, properly so called, of Buffon, who makes two species of the *Jacamar*.

" We have formed," says Buffon; " this name, by shortening the Brasilian appellation *Jacamaciri*. These birds differ not from the Kingfishers; except that their toes are disposed two before and two behind, while those of the Kingfishers are placed three before and one behind. But the *Jacamars* resemble them in the shape of their body and of their bill, and they are of the same size with the middle species of Kingfishers; and this is probably the reason that some authors—Edwards, &c.—have ranged them together. Willughby, Klein, &c. have classed the *Jacamars* with the Woodpeckers; the disposition of their toes being similar, and the shape of their bill nearly the same, though longer and more slender:

slender: but they are discriminated from the Woodpeckers; since their tongue is not longer than their bill, and the feathers of their tail are neither stiff nor wedge-shaped. It appears, therefore, that the Jacamars constitute a separate genus, which has as great affinity to the Woodpeckers, perhaps, as to the Kingfishers. It contains only two species, which are both natives of the hot climates of America."

The first species, or Jacamar properly so called, is the bird which we have figured from Edwards, and which he calls the Jacamaciri of Marcgrave.

The observation of Buffon, above quoted, that Edwards has classed it with the Kingfishers, is not true. "It would appear," says Edwards, "to be a perfect Kingfisher, were the feet conformable to that genus of birds; but, as it has toes two backward and two forwards, I have placed it between the Woodpeckers and Kingfishers." It seems strange, that Buffon should so have misrepresented Edwards, as his descriptions are in French as well as in English, and the express words

words in the former language, which Buffon could not possibly misunderstand, are—"je l'ai placé entre les Piverds et les Martins-Pêcheurs."

We shall give the entire description from Edwards, on whose fidelity we can always rely.

"The bill, which is not quite so thick as in Kingfishers, is straight, sharp-pointed, and of a black colour. It is ridged above and beneath; and, round the basis of the bill, both above and beneath, it has black bristles, in form of a beard, pointing forward. The throat, for an inch space beneath the bill, is white. The whole upper side, from bill to tail-end, is of a fine green colour, reflecting blue and golden glosses. The same green passes round on the fore-part of the neck, beneath the white spot on the throat. The green on the crown of the head, quill-feathers of the wings, and the tail, are almost blue. The tail has a faint appearance of transverse lines of a darker blue: it is composed of ten feathers. The inner coverts of the wings are orange-

orange-colour. The quills within-side are blackish: their tips, outwardly, are dusky, as is the under side of the tail. The belly, thighs, and coverts beneath the tail, are of a reddish orange-colour. The legs and feet, which are made like those of Woodpeckers, but much weaker in proportion to the bird, are of a brownish flesh-colour.

" This very curious bird," adds Edwards, " is one of those taken by Earl Ferrers. It is figured and described by Marcgrave: but, I believe, his was the female; for he makes the belly, &c. of the colour of yellow wax; whereas I make it reddish orange. See it's description in Willughby, and it's figure. Brisson has also figured and described this bird, in his Ornithology, Vol. IV. It is a bird of Brasil, and the warm parts of South America. Marcgrave—and Brisson, I suppose, from him—says, that it has blue eyes."

Buffon says—" This bird is about the size of a Lark, and it's whole length is six and a half inches. The bill is an inch and five lines; the tail only two inches, yet it projects
an

an inch beyond the wings when they are closed. The quills of the tail are very regularly tapered. The legs are very short, and of a yellowish colour. The bill is black, and the eyes are of a fine deep blue. The throat is white, and the belly rufous. All the rest of the plumage is of a very brilliant gold-green, with red copper reflexions. In some subjects, the throat is rufous, as well as the belly; in others, the throat is only a little yellowish. The colour of the upper side of the body, also, is more or less brilliant in different specimens, which may be attributed to age or sex.

“ These birds are found both in Guiana and Brasil. They inhabit the forests; and prefer the wet places, as affording their insect food in most abundance. They never join in society, but constantly reside in the most sequestered and darkest coverts. Their flight, though rapid, is short. They perch on the middle boughs; and remain at rest the whole of the night, and the greatest part of the day. They always are alone, and almost perpetually tranquil: yet there are, usually, a number in the same district, which make responses in a feeble,
broken

JACAMACIRI.

broken warble, but which is tolerably pleasant. Piso says, that their flesh, though hard, is eaten in Brasil."

The savages of Cayenne call this bird Venetou; and the Creoles give it the appellation of " Colebri des Grands Bois," or the Forest Colibri.





BRIAD FRUIT

BREAD-FRUIT.

OF the Bread-Fruit, or *Artocarpus* of Linnæus, there are two species: the *Artocarpus Incisa*, or Bread-Fruit Tree; and the *Artocarpus Integrifolia*, or Indian Jaca Tree.

They are milky trees. The leaves are alternate, stipuled; rolled up, when young, in the stipules, which soon fall off, leaving small vestiges. The aments are axillary, or terminating; the fruits are axillary on the stem and lower branches; and, in some varieties, they are wholly destitute of seeds.

The Bread-Fruit Tree is an object so interesting and curious, that we shall give a slight sketch of what has been said respecting it by several writers of the first authority.

The Younger Linnæus says, that it grows to the height of thirty or forty feet, having a trunk as thick as the human body; that the leaves, which are alternate, petioled, oblong,
deeply

BREAD-FRUIT.

deeply gashed, and scabrous, are two feet long; that it has two lanceolate large stipules, hirsute on the outside, including the younger leaves, and caducous; that it has violet-coloured peduncled aments, on the outmost branches, male and female on the same twig; and, that the whole tree, as well as the fruit before it is ripe, abounds with a very tenacious milky juice, which may be drawn out into threads.

Forster, and Thunberg, have each written still more minute botanical descriptions of this remarkable tree; which seems to have been first mentioned by Dampier, who gives us the following account.

“ The Bread-Fruit grows on a large tree, as big and high as our largest Apple Trees. It hath a spreading head, full of branches and dark leaves. The fruit grows on the boughs like Apples: it is as big as a penny loaf, when wheat is at five shillings the bushel. It is of a round shape, and has a thick tough rhind. When the fruit is ripe, it is yellow and soft, and the taste is sweet and pleasant. The natives of Guam use it for bread. They gather it

BREAD-FRUIT.

it when full grown, while it is green and hard; then they bake it in an oven, which scorches the rhind and makes it black: but they scrape off the outside black crust; and there remains a tender thin crust, and the inside is soft, tender, and white, like the crumb of a penny loaf. There is neither seed nor stone in the inside, but all is of a pure substance like bread. It must be eaten new; for, if it is kept above twenty-four hours, it becomes dry, and choaky: but it is very pleasant before it is too stale. This fruit lasts in season eight months in the year; during which time the natives eat no other sort of food of bread kind. I did never see of this fruit any where but here; but the natives told us, that there is plenty of this fruit growing on the rest of the Ladrone Islands."

It is likewise described by Rumphius, and by Anson.

In Captain Cook's Voyage it is observed, that the Bread-Fruit Tree is about the size of a middling Oak. Its leaves are frequently a foot and a half long, of an oblong shape, deeply

BREAD-FRUIT.

deeply sinuated like those of the Fig Tree; which they resemble in consistence and colour, and in the exuding of a white milky juice on being broken. The fruit is about the size and shape of a child's head; and the surface is reticulated, not much unlike that of a Truffle. It is covered with a thin skin, and has a core about as big as the handle of a small knife: the eatable part lies between the skin and the core; it is as white as snow, and somewhat of the consistence of new bread. It must be roasted before it is eaten, being first divided into three or four parts. Its taste is insipid, with a slight sweetness somewhat resembling that of the crumb of wheaten bread mixed with a Jerusalem Artichoke. This fruit not being in season at all times of the year, there is a method of supplying that defect, by reducing it to a sour paste called Mahie.

This tree supplies cloathing, as well as food; the bark being formed into a kind of cloth.

To procure the fruit for food, costs the inhabitants no other trouble, or labour, than climbing a tree.

a tree. These trees, indeed, do not grow spontaneously: but Capt. Cook tells us, that "if a man plant ten of them in his life-time, he will as compleatly fulfil his duty to his own and future generations, as the native of our less temperate climate can do by ploughing in the cold winter, and reaping in the summer's heat, as often as these seasons return; even if, after he has procured bread for his present household, he should convert a surplus into money, and lay it up for his children."

The principal varieties of this tree, are that in which the fruit is destitute of seeds, and that in which they are found. The latter may be considered as the tree in a wild state: the want of seeds being probably owing to cultivation; as in the Barberry, and the little Grape of Zant, commonly called Currants. The natives of Otaheite reckon at least eight varieties of that without stones, differing in the form of the leaf and fruit. The latter is generally globular, and smooth: but it is often rugged; and, as it were, scaly; and, not unfrequently, either oval, oblong, or cordiform. It is probable that, by extending the culture to

BREAD-FRUIT.

to distant countries, the varieties will hereafter be found much increased.

The fruit of the other variety contains a considerable quantity of oblong seeds, almost as large as chesnuts, which are attached to a fleshy and very considerable placenta, occupying the centre. They are eaten, in some places, by the savage inhabitants, either boiled or roasted ; but are more fibrous, less juicy, and in all respects much inferior to the former. Before the discovery of the South Sea Islands, therefore, the Bread Fruit had not acquired that degree of reputation which it is now known to deserve, though it had then been long known in many parts of the East Indies.

In Otaheite, the seedless variety is alone regarded. Capt. King informs us that, in the Sandwich Islands, these trees are plentiful, and flourish with great luxuriance on rising grounds; that they are not, indeed, in such abundance, but that they produce double the quantity of fruit which they do on the rich plains of Otaheite; that the trees are nearly of the same height, but that the branches begin to

to strike out from the trunk much lower, and with greater luxuriance; and, that the climate of these islands differs very little from that of the West Indian Islands which lie in the same latitude, or may, perhaps, on the whole, be rather more temperate.

It was, probably, in consequence of this hint, that his Majesty, in 1792, a second time sent Capt. Bligh to Otaheite. He had, on this occasion, two vessels purposely fitted up; which, after leaving some plants at St. Helena, arrived safely at St. Vincent's, with 551 cases, containing 678 Bread-Fruit Trees, besides a great variety of other fruits and plants, to the number of 1245. Nearly half this cargo was left there under the care of Mr. Anderson, superintendant of his Majesty's Botanic Garden, for the use of the Windward Islands; and the remainder, for the Leeward Islands, was conveyed to Jamaica: five plants only being reserved for the King's Botanic Garden at Kew; where the East-India Jacca, or Jack Tree, had been previously introduced by Sir Edward Hughes, K. B. in 1778. The true seedless sort, however, was

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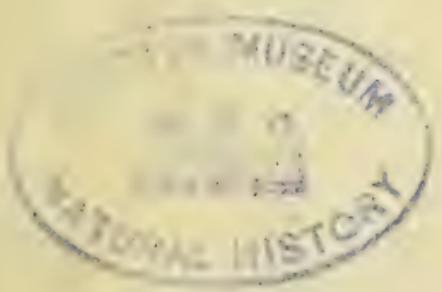
BREAD-FRUIT.

first introduced by Capt. Bligh, in 1793; whose cruel sufferings, in his former voyage for the same purpose, are universally known.

The Bread Fruit is called, in the Malay language, Söur, or Sune, in Makassar, Bakar; in Ternate, Gomo; in Tinian, Rima. The Dutch call it, Sockrboom; the Germans, Brodbaum; the French, Rima, or Fruit à Pain.

The Brosimum Alicastrum, called the Bread Nut Tree, in Jamaica, where it greatly abounds, seems of near affinity to the Bread-Fruit. The general resemblance is very considerable; and the fruit, which tastes much like the Chestnut, is said to have frequently preserved the Negroes from famine.

The variations perceptible in the several accounts of different navigators, must be referred to their having seen different species or varieties; the want of which consideration, in subjects of natural history, often proves a source of error, of confusion, and of injustice.





PERUVIAN SHREW.

Published, April 1799 by Harrison, late of Mrs. West, Street.

PERFUMING SHREW.

THE Perfuming Shrew, as this curious and beautiful little animal is denominated by Pennant, is the *Sorex Cœrulæus*, or Blue Shrew, in the Linnæan System published by Gmelin, though it was not known to the great Swedish naturalist. Buffon, too, appears to have been wholly unacquainted with this animal, which may be seen in the Leverian Museum. Indeed, it seems far from certain that, till lately, it had been at all observed by naturalists.

It has been conjectured, that it may possibly be the *Mus Pilorides* of Pallas; and it has even been thought the *Mus Albus Zeylonicus*, or Ceylonese White Rat, of Brisson. Doubt is, however, evidently entertained by Pennant, though he gives both as synonimes; and, we think, the doubt is far better founded than any idea of their being the same animal.

In Buffon's Supplement to his article Rat,
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we meet with a passage which affords us some slight intimation of the Perfuming Shrew; but we incline to believe that, if this animal were in reality designated, it would have been described more particularly, by its most obvious distinctions of form and colour. We shall extract what we allude to, that our readers, on comparing it with the subsequent description of the Perfuming Shrew, may form an opinion of their own on the subject.

" M. le Vicomte Querhöent," says Buffon, " has favoured me with the following remarks—That the Rats, transported from Europe to the Isle of France, increased to such a degree that, it is alledged, they made the Dutch leave the island. The French have diminished the number, though great quantities of them still remain. Some time, adds M. De Querhöent, after a Rat resides in India, he acquires so strong a smell of musk, that he scents every thing for a considerable space round his habitation; and it is asserted that, when he comes near wine, he makes it turn sour. This Indian Rat appears to be the same which the Portuguese call Cheroso, or the Odoriferous Rat.

Rat. La Boullaye-le-Goux says, "that it is very small, and nearly of the figure of the Ferret; that its bite is venomous; that its smell is immediately perceived when it enters a chamber; and that it cries—“Kric, kric, kric.” This Rat,” Buffon adds, “is likewise found in Madeira, where it is called the Scented Rat. It is mentioned by the Dutch voyagers; who tell us, that its skin is as fine as that of the Mole, but not so black.”

Pennant describes the Perfuming Shrew in nearly the following words—“It has a long slender nose; the upper jaw extending far beyond the lower. The upper fore-teeth are short; the lower are long, slender, and incurvated. The whiskers are long, and white. The eyes are small; and the ears transparent, broad, and round. The hair is short and close on the head and body, and of a fine pale cœrulean colour; the belly is lighter; and the feet, which are naked, are pink-coloured. The length, from the nose to the tail, is nearly eight inches. The tail, which is three inches and a half long, is quite naked: it is round; thick

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at the base, and tapering to a point; and of the same colour as the feet."

He adds—"It inhabits Java, and others of the East Indian islands; eats rice; and has so strong a scent of musk, as to perfume every thing it runs over. I have it from the most undoubted authority," concludes Pennant, "that it will render the wine in a well-corked bottle not drinkable, by merely passing over it."

In Kerr's translation of the *Mammalia* of Linnæus, where this animal is called the Blue Shrew, it is thus characterised—"The tail is of a middle length; the upper parts of the body are of a pale blue colour, and the belly lighter, with white legs and feet."

It is also observed, that the ears are naked; the fur is close set, as well as short; and the under fore-teeth are crooked inwards. The rest of the description entirely corresponds with what is said by Pennant. Both remark, that Cats will not touch this animal.

Pennant

Pennant describes no less than sixteen different species of the Shrew; and they are all adopted, by Mr. Kerr, in his translation of Linnæus, as follows—1. the Minute Shrew, or *Sorex Minutus*; 2. the Musky Shrew, or *Sorex Moschatus*; 3. the Water Shrew, or *Sorex Fodiens*; 4. the Javan Shrew, or *Sorex Murinus*; 5. the Fetid Shrew, or *Sorex Araneus*; 6. The Labradore Shrew, or *Sorex Arcticus*, with a variety called the Grey Labradore Shrew, or *Sorex Arcticus Cinereus*; 7. the Surinam Shrew, or *Sorex Surinamensis*; 8. the Timid Shrew, or *Sorex Pusillus*; 9. the Brasilian Shrew, or *Sorex Brasiliensis*; 10. the Pigmy Shrew, or *Sorex Exilis*; 11. the Blue Shrew, or *Sorex Cœrulæus*; 12. The Mexican Shrew, or *Sorex Mexicanus*; 13. the White-footed Shrew, or *Sorex Albibipes*; 14. the Square-tailed Shrew, or *Sorex Quadricaudatus*; 15. the Carinated Shrew, or *Sorex Lericaudatus*: and 16. the Uniform Shrew, or *Sorex Unicolor*.

The last four animals, however, Mr. Kerr remarks, “ though ranked by Mr. Pennant as distinct species of this genus, I am apt to suspect

pect are only varieties of the Common Fetid Shrew, or *Sorex Araneus*. They were all discovered by Professor Herman, in the neighbourhood of Strasberg; but, as Mr. Pennant does not quote the book, it is impossible to ascertain their proper place in system without farther information."

Buffon observes, that the Shrews seem to form a link in the chain of small animals, and to fill the interval between the Rat and the Mole; which, though they resemble each other in size, differ greatly in figure, and are very distinct species.

The generical characters of the Shrew are these—"It has two long fore-teeth in the upper jaw, which are divided into two points: and in the lower jaw are two, or four, fore-teeth; the two middle ones being, in the latter case, shorter than the others. On each side, in both jaws, are two or more tusks. The grinders are knobbed."

To this we may add, that the animals of this genus have, in general, thick clumsy bodies, and

five toes on each foot. The head resembles that of the Mole; being thick at the forehead, much elongated, and ending in a conical snout. The eyes are also very small. In other circumstances of general figure, they resemble the murine tribe of quadrupeds. They burrow in the ground. Some species live chiefly about the sides of waters, and most of them feed on worms and insects. They have, in general, a strong smell. Even the Common Shrew Mouse, according to Buffon, has a strong and very peculiar odour; which is so disagreeable to the Cats, that though they pursue and kill the Shrews, they never eat them.

Buffon, with his usual prejudice, ventures to assert, "that the Shrews, which are very common in Europe, do not "seem" to exist in America;" yet it is well known that there are several species which are natives of the new world. Of these, he only notices the Brasilian Shrew; observing, that "it is larger, and appears to be a different species." We agree, that the species may be different, but the genus is undoubtedly the same.

PERFUMING SHREW.

The Pigmy Shrew, found in Siberia, is supposed to be the smallest quadruped ever discovered, it's weight scarcely exceeding half a drachm: but, though the Shrews are usually very small, some of them are much larger than the Common Rat.





CAYENNE YELLOW WOODPECKER WITH BLACK SPOTS

Published 1878 by Harrison & Sons, 11, Fleet Street.

CAYENNE YELLOW WOODPECKER WITH BLACK SPOTS.

THOUGH Edwards, whose excellent figure we have delineated, calls this bird the Yellow Woodpecker with Black Spots; he observes, that it “is not strictly and properly a Wood-pecker, having its tail-feathers softer, and not worn at their ends, by which it seems not to be a climber up and down the bark on the bodies of trees, like the Woodpeckers. Brisson,” he adds, “calls this genus of birds by the name Barbu.”

Edwards, in his classical Catalogue, or Index, has arranged this bird among those which are “of kin to Cuckows.” In that list he has also placed the Jacaimaciri of Marcgrave, which Buffon erroneously asserts that he had classed with the Woodpeckers.

Our Cayenne Yellow Woodpecker with Black Spots, is thus minutely described by Edwards—

CAYENNE SPOTTED WOODPECKER.

" The bill is black, bending a little downward at the point: at the basis of the upper mandible are a few black bristles, pointing forward over the nostrils. The forehead, and the throat for more than an inch deep, is covered with fine scarlet feathers. The hinder part of the crown of the head is yellow, with some black intermixed. The sides of the neck, from the hinder corners of the eye downward, are grey, or a mixture, rather, of black and white. A dusky line passes from the angle of the mouth to the eye. The neck behind, back, rump, and the wings without-side, are of a dark dusky colour, the feathers being edged with an olive green; and, in the row of coverts next above the quills, each feather has a yellowish spot on it's outer web. The covert-feathers within-side of the wings are of a yellowish white. The insides of the quills, and under-side of the tail, are of an ash-coloured brown. The tail has ten feathers, of a dark brown or dusky colour on their upper sides; the middlemost the longest, which gradually shorten toward the sides: they are soft at their ends, and not worn by climbing on the barks of trees. The breast, belly, thighs, and covert-feathers

feathers beneath the tail, are of a bright yellow colour; those on the breast and belly are finely marked with oval black spots; and the thighs, and coverts under the tail, are transversely mixed with black or dusky lines. The legs, feet, and claws, are black. The two forward toes of each foot are a little connected at their bottoms; the hinder toes are wholly detached from each other.”

This, Edwards observes, was one of those curious birds taken by the Right Honourable Earl Ferrers, in a French prize; and he adds, that he believes it to have never before been either figured or described. Le Barbu Tacheté de Cayenne, however, figured and described by Brisson, in the fourth volume of his Ornithology, Edwards thinks, can be no other than the female of this Cayenne Yellow Woodpecker with Black Spots; it differing only as female birds do from the male.

In Buffon’s description of the Yellow Woodpecker of Cayenne, he says that he has received ten species of Woodpeckers from Guiana, and that the Yellow Woodpeckers seem peculiar

CAYENNE SPOTTED WOODPECKER.

peculiar to that country. Most of these, he remarks, are scarcely known to naturalists, and Barrere has only noticed a few. The Creoles of Cayenne call them Yellow Carpenters.

We do not recognise, however, among any of those birds which Buffon has described, the Cayenne Woodpecker with Black Spots, as given by Edwards.

There are several of the Woodpeckers, and some other birds, which seem in many respects to resemble the present object of our enquiry; but we are unable to discover any one, in particular, which has been described by naturalists, that sufficiently agrees with the figure and description of Edwards, for us absolutely to assert, that it is, in fact, this very bird. We denominate it, however, after Edwards, the Yellow Woodpecker with Black Spots; though, with him, we are far from being satisfied that it is, positively, even of the Woodpecker tribe.

It seems to us not unlikely, that this bird may be a species of what Buffon has divided into

into Barbets and Tamatias, though we do not perceive it's exact similitude among any of those which he has particularly described.

"Naturalists," he observes, "have applied the epithet Bearded, to several birds which have the base of their bills beset with detached feathers, long and stiff like bristles, all of them direct forward. But we must observe that, under this designation, some birds of different species, and from very distant climates, have been confounded." To these birds, when natives of America, Buffon gives the name of Tamatia; and appropriates that of Barbet solely to those of the old world. "Both," he says, "fly with great difficulty, on account of the thickness and unwieldiness of their body. Though different, they resemble each other in many characters: for, besides the long slender bristles that cover the bill, either wholly or partially, so as to form the beard; and the position of the feet, two toes before and two behind, which is the same in both; they have equally a squat body, a very large head, and a bill not only exceedingly thick, but somewhat curved below, convex above, and compressed

CAYENNE SPOTTED WOODPECKER.

on the sides. In the Barbets, however, the bill is sensibly shorter, thicker, and rather less convex below, than in the Tamatias. Their dispositions also differ: the former are sedate, and almost stupid; while the latter, which inhabit the East Indies, attack the small birds, and nearly resemble the Shrike in their œconomy."





DANDELION OF NEW SOUTH WALES.

Published 1800 by Morrison & Son, 8, Fleet Street

DANDELION OF NEW SOUTH WALES.

ALL the information which we have received with the beautiful original drawing here copied on a somewhat smaller scale, was written beneath the figure.

It is said to be of the natural size ; and appears smaller than the European Dandelion. The flower, in particular, seems much more minute, in proportion to the size of the leaf.

The drawing was thus underwritten—

“ This weed grows principally on a rank and wet ground, and on the banks of stagnate rain water. It makes a very pretty appearance among the other flowers with which this country so agreeably abounds.”

Ways to Enhance

the Learning Environment

for Students with Disabilities

and Special Needs

and How to Implement them

in the Classroom

and How to Gain Effectiveness

and How to Implement them



LONG-TAILED MANS.

Publish'd. 1st. May 1799 by Harrison (see Vol. I. p. 22.)



LONG-TAILED MANIS.

THE Manis is a genus of animals in the Linnæan system, characterised as having no teeth; the tongue being round, and very extensile; the mouth small, and situated at the extremity of the snout; and the upper parts of the body covered with moveable bony scales. Pennant says—“These animals approach so nearly the genus of Lizards, as to be the links in the chain of beings which connect the proper quadrupeds with the reptile class.” He describes three different species, which are now known; but Linnæus, and Buffon, were unacquainted with more than two.

“These animals,” says Buffon, “are commonly known by the name of Scaly Lizards.” He adds—“We have rejected this denomination, first, because it is compounded; secondly, because it is ambiguous, and is applied to both species; and, thirdly, because it is improper, these animals being of a different class from the Lizards, which are oviparous reptiles,

reptiles, while the animals under consideration are viviparous quadrupeds."

In treating of these animals, Buffon adopts their East Indian names: the *Manis Pentadactyla* of Linnæus, or Short-Tailed Manis of Pennant, he denominates the Pangolin; and the *Manis Tetradactyla*, or Long-Tailed Manis of Pennant, being the animal which we have figured, is what he calls the Phatagin. The third, or newly-discovered species, is described, by Pennant, under the name of the Broad-Tailed Manis.

We shall extract the general observations of Buffon, though he has not always sufficiently discriminated what more particularly appertains to one species than the other.

"All Lizards," he observes, "are entirely covered with a smooth skin, variegated with spots which resemble scales: but the Pangolin, and Phatagin, have no scales on the throat, breast, and belly. The Phatagin, like other quadrupeds, has hair on all the inferior parts of the body; and the Pangolin has,

has, on these parts, a smooth skin only, without hair. The scales, which cover the other parts of both these animals, adhere not entirely to the skin, but are strongly fixed by their under parts only. Like the quills of the Porcupine, they are moveable; and are elevated, or depressed, according to the will of the animals. When irritated, they erect their scales; and, particularly, when they roll themselves up like a ball, these scales are so hard, large, and poignant, that they repel every animal of prey. They form an armour which wounds, as well as resists. The most cruel and famished creatures—as the Tiger, Panther, &c. endeavour in vain to devour these animals. They trample on them, and toss them about; but, whenever they attempt to seize them, they receive very dangerous and painful wounds. No animal of prey is able to face, crush, or suffocate them, although it load them with its whole weight. The Fox is afraid of the Hedgehog, when rolled up: but he forces it to extend, by trampling on it with his feet; and, as soon as the head appears, he seizes it by the snout, and thus accomplishes his purpose. But, of

all

all animals, without excepting the Porcupine, the armour of the Manis is the most offensive. When these animals contract their bodies, and present their armour, they brave the fury of all their enemies. Besides, when rolled up, these animals assume not, like the Hedgehog, a globular figure: their body, in contracting, takes the form of a clue; but their long thick tail remains without, and serves as a ring or belt to the body. This exterior part, by which it would appear the animal might be seized, defends itself; for it is furnished, both above and below, with scales as hard and sharp as those which cover the body; and, as it is convex above, and flat below, and has nearly the figure of a half pyramid, the angular sides are covered with sharp pointed scales: so that the tail seems to be still more carefully defended than the body, the inferior parts of which have no scales. The Pangolin, when full grown, is from six to eight feet long, including the tail, which is nearly the length of the body, but appears to be proportionably shorter while the animal is young. The scales are also smaller and thinner, and of a paler colour; but, in the adult animal,

their

their colour becomes deeper, and they acquire such a degree of hardness as to resist a musket-ball. The Phatagin is much less than the Pangolin. Both of them have some relation to the Great and Middle Ant-Eaters: for they feed on Ants; have very long tongues; a narrow mouth, without any apparent teeth; very long bodies and tails; feet and toes nearly of the same size and figure, though different in number, both species of *Manis* having five toes to each foot, while the Ant-Eaters have only four on the fore-feet. The latter are covered with hair, and the former with scales; neither are they natives of the same continent. The Ant-Eaters are found only in America, and the two species of *Manis* in the East Indies and Africa. They are called Quogelo, by the Negroes, who eat the flesh of these animals, which they reckon delicate and wholesome. They use the scales for several purposes. In short, these creatures have nothing disgusting about them but their figure. They are gentle and innocent, feeding only on insects. They run slowly; and cannot escape from a man, otherwise than by concealing themselves in holes of rocks, or in those

those which they dig in the earth, where the females bring forth their young. They are two extraordinary species; not numerous, and very useless. The oddness of their form seems to be intended to constitute the last shade between the figure of quadrupeds and that of reptiles."

Such is Buffon's account, in which he has egregiously erred respecting the number of toes, as is sufficiently obvious from the Linnæan names alone of two species. To say of these animals, that they are "very useless," is at best presumptuous; and, most probably, it is also false. If they destroy noxious insects, their utility seems manifest.

Of the Long-Tailed Manis, in particular, which we have figured, we shall give the account and description as published by Pennant. He informs us, that it is the *Lacertus Peregrinus Squamosus*, of Clusius; the Scaly Lizard, of Grew, the *Manis Tetradactyla*, and *Manis Pedibus Tetradactylis*, of Linnæus and Schreber; and the *Phatagin* of Buffon, as well

well as of the Ashmolean, British, and Leve-
rian Museums:

It has, he says, a slender nose ; that, and the head, being both smooth. The body, legs, and tail, are guarded by large, sharp-pointed, striated scales. The throat and belly are covered with hair. It has short legs ; and four claws on each foot, one of which is very small. The tail is a little taper, but ends blunt. The colour of the whole animal is a chocolate.

These animals inhabit the islands of India. They grow to a great length : that which was preserved in the Museum of the Royal Society was a yard and a half long ; from the tip of the nose, to the tail, was only fourteen inches, the tail itself was a yard and half a quarter.

The Long-Tailed Manis so nearly resembles the Short-Tailed Manis, that they have, by some naturalists, been regarded rather as varieties than distinct species ; and Linnæus, in his *Systema Naturæ*, after noticing the specific character of the *Manis Tetradactyla*, remarks, that

that it is almost too nearly allied to the Manis Pentadactyla, to be regarded as distinct. When, however, we come to consider, that this animal has only four toes, while the latter has constantly five; that the length of the tail is prodigiously greater in proportion; that the form of the furrowed or striated scales is more oblong, and even acuminated; that the colour is chocolate, while that of the Short-Tailed Manis is a pale yellow; and that the magnitude of the latter animal is sometimes eight feet, the tail being four; together with other perceptible, though less manifest distinctions; we may fairly conclude, that a really specific difference prevails between them.

Their general habits, and modes of life, however, are supposed to be same.

The Broad-Tailed Manis has five toes on the fore-feet, and four on the hind. This seems a good argument in favour of the Linnaean names of distinction.





NICOBAR PIGEON.

Engraved, 1828, by Sharpe & C. New York, Feb. 16.

NICOBAR PIGEON.

THIS beautiful bird is the *Columba Nicobaria*, of Linnæus, Gmelin, and Klein; and the Nicobar Pigeon, of Edwards, Latham, and other naturalists.

According to Edwards, whose exquisite figure we have adopted, the Nicobar Pigeon appears to be about the size of a Common Pigeon.

"The bill is of a blackish or dusky colour: the upper mandible a little overhangs the lower; and a rising is seen over the nostrils, as in most Pigeons. The eyes are hazel-coloured, with black pupils. The head, neck, breast, belly, thighs, and covert-feathers beneath the tail, are all of a dark blueish purple. The feathers on the neck are long and pointed, like those on the Domestic Cock, reflecting exceedingly fine changeable glosses of blue, red, gold, and copper colours. The back, and upper side of the wings, are green, changing to copper and gold.

NICOBAR PIGEON.

gold. The outermost quills are of a fine blue, as are the covert-feathers immediately above them: the tips of the quills, for a good depth, are of a dark dusky blue. The tail, and its upper covert-feathers, are white. The legs and feet are covered with reddish purple scales."

* The conclusive remarks of Edwards are very characteristic of that excellent naturalist: who seems to have had a very contemptuous opinion of the abilities of Albin, mingled with much of what is usually called jealousy, or envy of another's success; but which, we conceive, on the present occasion, as well as in many similar cases, is the manly regret of superior talents, on perceiving a misapplication of popular favour, where little or no merit in fact exists.

"Albin," observes Edwards, "has figured what he calls the Cock and Hen of this species, in his History of Birds. I examined them, afterwards, at Sir Hans Sloane's, but could see no difference, from whence to conclude that they were male and female, or that their

NICOBAR PIGEON.

their history required two distinct figures. The bird from which I drew my figure is now—A. D. 1762—living in the menagerie of the Right Honourable Earl Tilney, at his house in Essex. Albin calls it the Ninkcombar Pigeon on his plate, and Nincombar in his description. The established name of the island from whence it came is Nicobar; and, with some smaller companions about it, the Nicobars. They are situated to the north of Sumatra, from seven to nine degrees north latitude. Brisson has taken Albin's name and description of this bird into his Ornithology. My intention in figuring it was to excel those of Albin: how far I have succeeded, the public may judge."

Here is a very honest, though blunt, avowal of Edwards's intention to surpass Albin; and it is but justice to acknowledge, that he does not appear to have over-rated his own abilities.

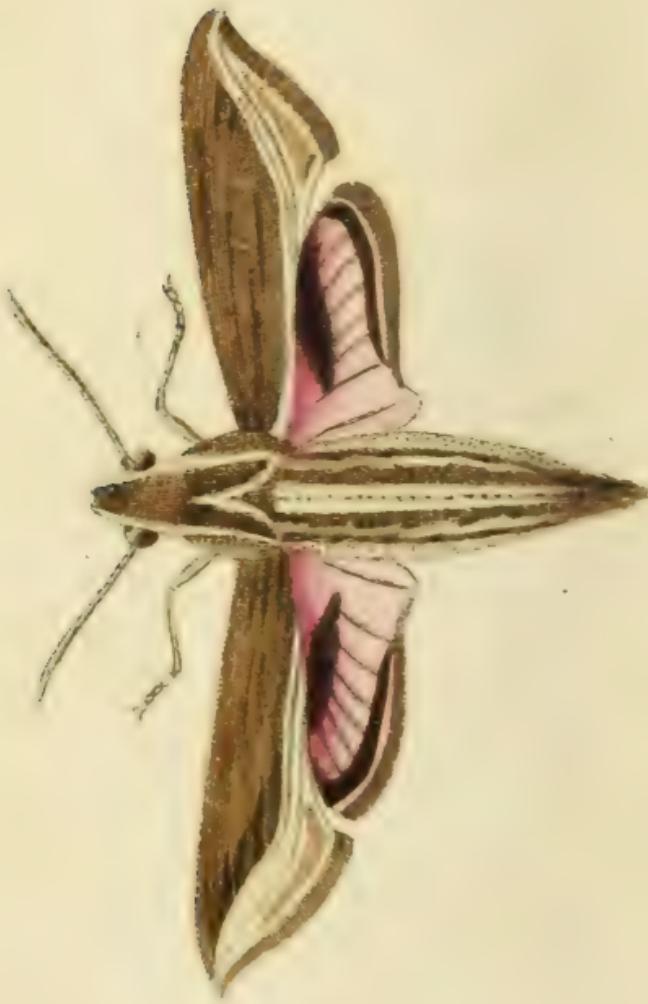
Buffon, who abridges the description of Edwards, notices the inferiority of Albin.

"According

NICOBAR PIGEON.

"According to Edwards," says he, "who has, since Albin, given an excellent description, and an accurate figure, of it, the size does not exceed that of an ordinary Pigeon." He also remarks the error in the name.





INQUILINUS MOTH.

Published, Nov. 23, 1799 by Marion (late S. C. H. & Co., N.Y.)

INQUILINUS MOTH.

THIS elegant Moth was originally figured by the late Mr. Moses Harris; who informs us, that it was taken in Bunhill Fields, London, the latter end of July 1779, by a gentleman, who gave it to Mr. Ellis, of George Street, Foster Lane, Cheapside. This last gentleman, having set it, presented it to Mr. Francillon, out of whose very curious and valuable collection, Mr. Moses Harris had it to draw and describe.

It is named the *Inquilinus*, and expands nearly three inches. The figure, in fact is of the natural size.

The description of it, as given by Mr. Moses Harris, is as follows—

“ The eyes are of a dark olive brown, over each of which is a line of a brownish white colour. The head and thorax are of an olive brown, dashed with streaks of dark or dirty brown.

INQUILINUS MOTH.

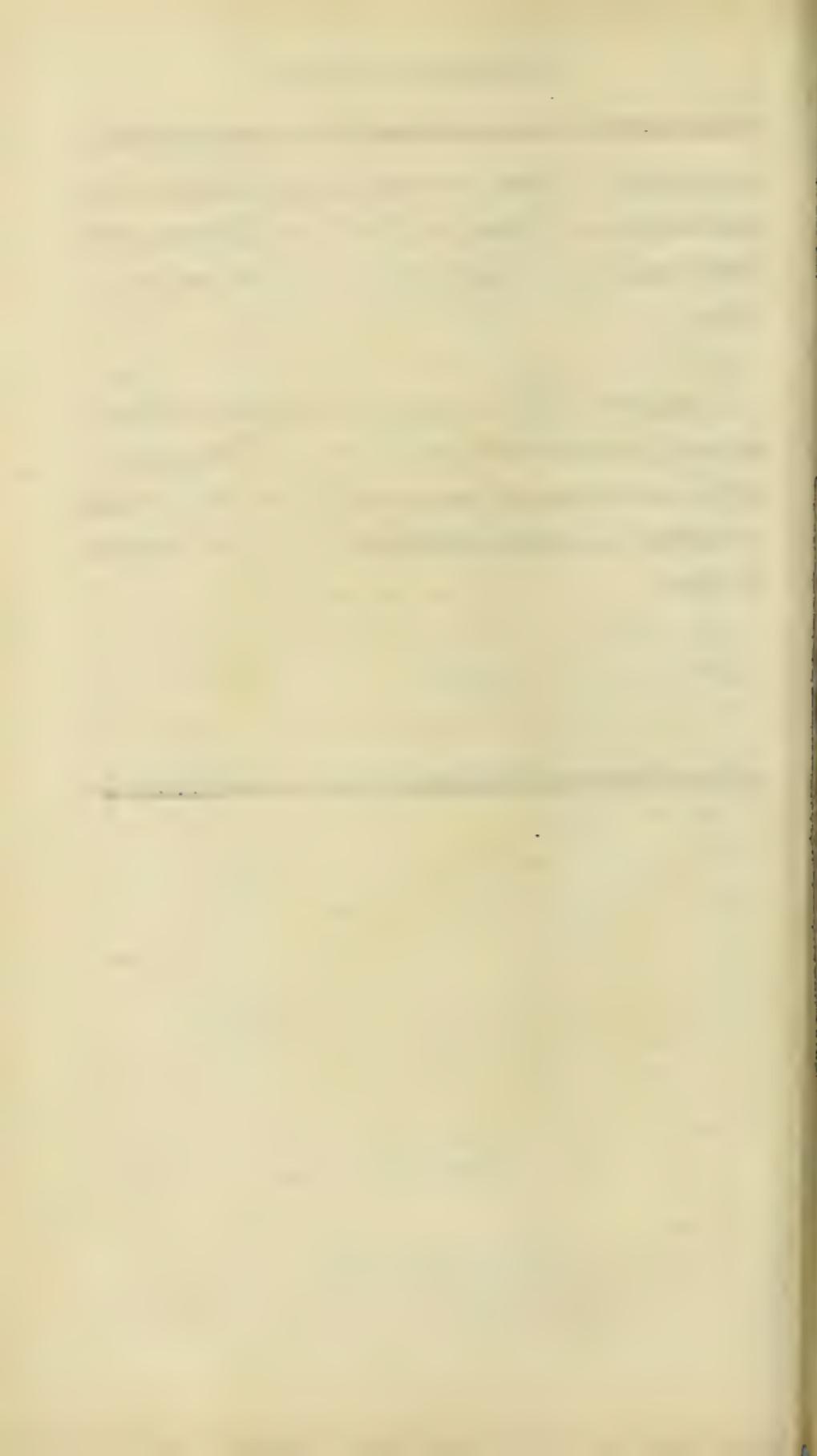
brown. The antennæ are thick towards the extremity, like a club; but sharp and hooked at the end, and of a pale brown colour. The superior wings are of an olive brown colour, and have irregular streaks of black nearly parallel. The fan edges have a broadish border of a dusky brown colour. A broad stripe, or band, of a cream colour, arises on the slip edge near the thorax; and, proceeding from thence in a parallel till over the lower corner of the wing, then turning a little upward, it ends at the apex or tip. Between this line and the lower corner, a triangle of lightish brown is thus formed, and which contains a lesser triangle of a darkish brown. The inferior wings are of a palish rosy hue; having a darkish cloud in the middle, and a double border of brown on the fan edge. The abdomen is of a pale brown, darkish towards the upper part: down the middle is a broad light-coloured list, from the thorax to the anus, which is sharp, or pecked. This stripe, or list, has an occult dotted line down the middle.”

From the circumstance, that this is the whole account given by Mr. Moses Harris, it may
be

INQUILINUS MOTH.

be presumed that he was unacquainted with the Inquilinus Moth in it's chrysalis state, and knew nothing of it's peculiar habits or qualities.

It is, probably, a very scarce species; since, though it was found, as it were, in the metropolis, we know of no person in London who possesses a second specimen of this elegant Moth.





HUNSTY CAVY.



P. H. S. & Co., Lithographers, 10, Newgate Street, London.

BRISTLY CAVY.

THE native name of this animal, which Mr. Bruce says, in his celebrated travels, is the Ashkoko, has afforded the English generical name corresponding with the Hyrax of Linnaeus. This genus of animals is characterised as having two broad and distant fore-teeth above; four contiguous broad, flat, notched fore-teeth, below; and four large grinders on each side, in both jaws: their fore feet have four toes, the hind feet only three; and they have no tail, or any collar bones. Of this genus, there are only two species: the Cape Ashkoko, or *Hyrax Capensis*; and the Syrian Ashkoko, or *Hyrax Syriacus*. In all the early editions of the *Systema Naturæ*, as well as by Pennant and other ingenious naturalists, these animals were referred to the genus Cavy: the former being the Cape Cavy, and the latter the Bristly Cavy, of Pennant and others.

The Bristly Cavy, which is the animal we have here figured, is supposed to be the *Agnus Filiorum Israel*, of Prosper Alpinus; and the

Daman

Daman Israel, of the Arabs ; which last name is also adopted by Buffon, and applied to Dr. Shaw's Jird, or Saphan of the Sacred Writings ; said to be mistranslated, as the Coney, or Rabbit.

On this subject, however, ingenious men have greatly differed ; and, perhaps, it is still doubtful, to what particular animal the Scriptures allude : so that, in fact, were a new translation to be made, we are far from certain that any proposed alteration would be an amendment. All the essential meaning is sufficiently evident to the most rigid observer of the Levitical Law. The Coney, or Rabbit, as well as the Hare, which it immediately precedes in the list of prohibited animal food, are equally described ; and both descriptions, perhaps as far as they proceed, may be alike applicable to other animals, without any just impeachment of the present translation.

The Bristly Cavy, according to Pennant, was first taken notice of by Prosper Alpinus, who calls it Agnus Filiorum Israel ; the Daman Israel of the Arabs. He says, it is larger than

than a Rabbit, has sweeter flesh, and is an object of the chace. Mr. Bruce informs us, that these animals inhabit Mount Libanus; the Mountain of the Sun, in Abyssinia; and, in vast numbers, Cape Mahomet, on the Arabian Gulph, not far to the east of Suez. We find by Alpinus, that they are also inhabitants of Egypt. "They are," says Pennant, "gregarious; and sit by dozens on the great stones, to bask in the sun, before the mouths of caves or clefts in the rocks, their places of refuge at the sight of man. They are justly supposed, by Mr. Bruce, to have been the Saphan (mis-translated the Coney) of Holy Writ. They retire into the depths of the clefts, and there make themselves a house; i. e. a nest of straw. Neither the Christians of Abyssinia, or the Mahometans, eat the flesh of these animals. The Arabs of Mount Libanus, and of Arabia Petræa, use them as food. Their flesh is as white as a chicken, and free from any rankness. Mr. Bruce supposes, that Dr. Shaw intended this animal by his Jird; but," observes Mr. Pennant, "as our learned countryman expressly says, that his animal has a tail, and that only a little shorter than the Common Rat's,

we must have recourse to some other species, perhaps genus, for the Jird of Barbary."

To this opinion of Mr. Pennant, we shall add the description of the Bristly Cavy, as compiled chiefly from Mr. Bruce.

The body and head of this animal measures about eighteen inches. It has short oval ears, covered within and without with hair. The colour of the whole animal, above, is grey and ferruginous, like that of the Wild Rabbit; the throat, breast, and belly, being white. All over the body, there are a number of long, strong, and polished bristles, scattered among the fur. Each side of the mouth is garnished with whiskers, said to be three inches five-eights in length; and, above the eyes, there is another tuft of similar hairs, two inches and a quarter long. In walking, which is performed by creeping low, with the belly almost touching the ground, the hind feet are used as far as the heel. The toes have short, broad, and weak, flat nails; except the inner toe of the hind foot, which is provided with a flat crooked nail, somewhat longer than the rest.

The

BRISTLY CAVY.

The soles of the feet are formed of fleshy naked protuberances, divided by furrows; the hair on the toes is black.

This animal, which feeds entirely on vegetables, is mild, feeble, timid, easily tamed, and has no voice or cry. Mr. Bruce is of opinion, that it chews the cud; and is the Gannim, or Daman Israel, of the Arabs, and the Saphan of the Sacred Scriptures, which is erroneously translated, the Coney, or Rabbit.

the old Germanic one, but also the new one.
The old Germanic one was the one that
was used by the Vikings, the Normans,
and the Danes. The new one was the one
that was used by the English, the French,
and the Germans. The old Germanic one
was the one that was used by the Vikings,
the Normans, and the Danes. The new one
was the one that was used by the English,
the French, and the Germans.



YELLOW CRESTED COCKATOO

Published by Harrison Fisher, 80 Pall Mall, Piccadilly.

YELLOW-CRESTED COCKATOO.

THIS elegant bird, which was figured by Edwards, had been previously delineated and described by Albin. "I hope," says the former, "this figure of mine will be thought an amendment of Albin's."

It is called, by Edwards, the Lesser White Cockatoo with a Yellow Crest; and he observes, that it is a size less than the Common Grey Red-Tailed African Parrot. He drew this bird at Lord Tilney's house, in Essex; and, observing that Albin had not mentioned its native place, says that it is an inhabitant of the Dutch East-India Islands. He adds, that Brisson, in his Ornithology, he believes, has described this same species, which was brought from the Philippines.

The description given by Edwards is as follows—"The bill is of a dark ash-colour; and has notches, or angles, on the sides of the upper mandible. It has very long feathers, of a fine yellow colour, on the top of the head, which

YELLOW-CRESTED COCKATOO.

which it can raise into a towering crest, or let fall, at pleasure. The eyes are placed in plats of light lead-coloured bare skin: their irides are bright orange; their pupils, black. Beneath each eye is a large spot of yellow feathers: the rest of the plumage, from the head downwards, is white; except a faint shade of yellow on the breast, the sides under the wings, and the insides of the wings. The wings and tail are almost equal in length. The legs and feet are covered with a dark blueish, lead-coloured, scaly skin."

The Yellow-Crested Cockatoo is the *Psittacus Sulphureus*, of Linnæus, and of Latham; the *Psittacus Albus Galleriatus*, of Frisch; the *Cacatua Luteo-Cristata*, of Brisson; the *Kakatoëha Orientalis*, of Seba: and the Yellow-Crested Cockatoo, of Buffon.

" Of this species," says Buffon, " there are two branches, differing in size. In both, the plumage is white, with a yellow cast under the wings and the tail, and spots of the same colour round the eyes. The crest, which is yellow citron, consists of long, soft, ragged feathers,

feathers, which the bird elevates and projects. The bill and feet are black. It was a Cockatoo of this species, and probably the first ever seen in Italy, that Aldrovandus describes; and he admires it's elegance and beauty. It is as intelligent, gentle, and docile, as the White-Crested Cockatoo.

"We saw," adds Buffon, "this beautiful Cockatoo alive. It expresses joy, by shaking it's head briskly several times upwards and downwards; making a slight cracking with it's bill, and displaying it's elegant crest. It returns caresses; touches the face with it's tongue, and seems to lick it. The kisses are soft and gentle. When one hand is laid flat under it's body, and the other rests on it's back, or only touches it's bill, it presses firmly; claps it's wings; and, with it's bill half open, it blows and pants, and seems to feel the most intoxicating delight. It repeats this as often as we please. It is also very fond of being scratched; and holds it's head, and raises it's wing, to be stroked. It often whets it's bill, by gnawing and breaking bits of wood. It cannot bear the confinement of the cage, but

it

YELLOW-CRESTED COCKATOO.

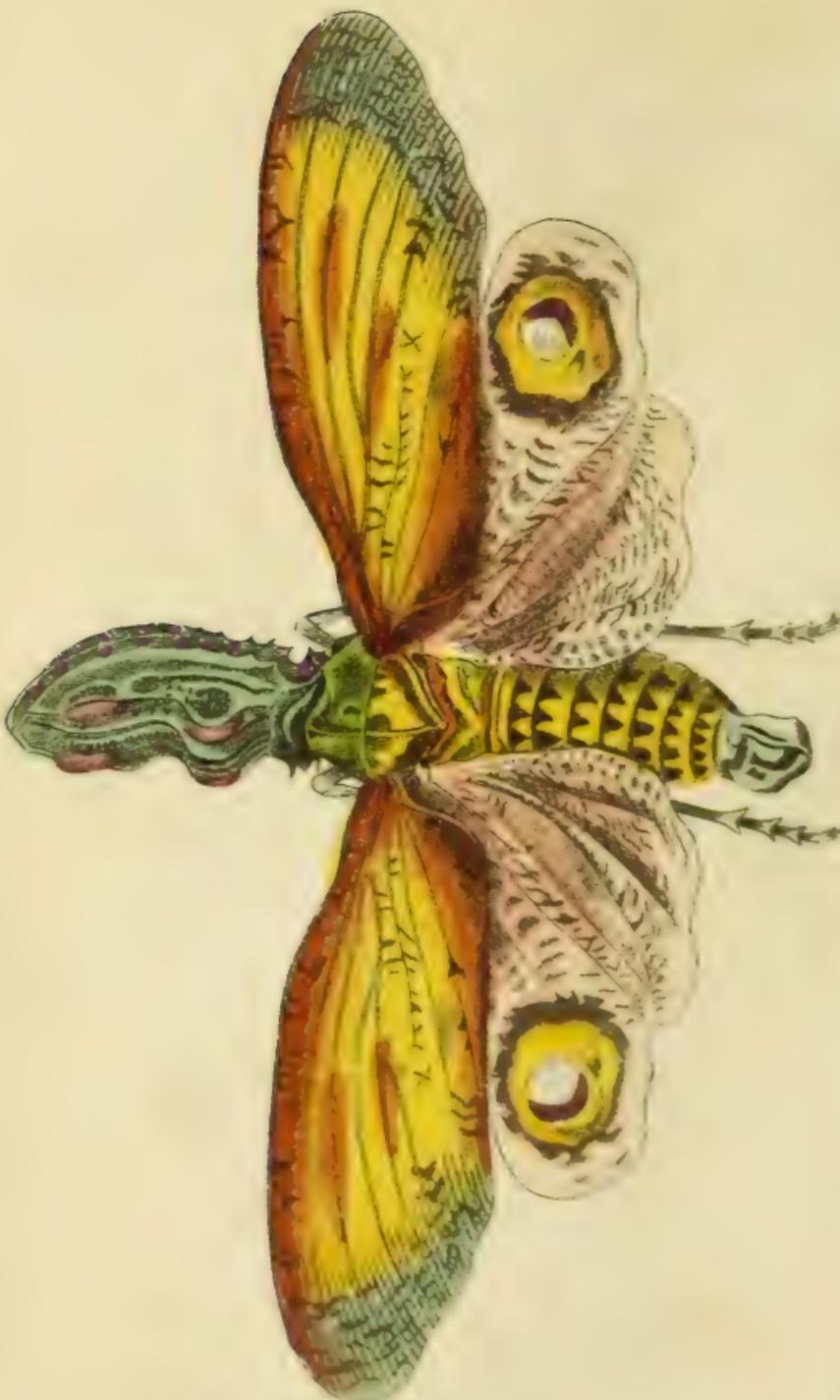
it never roves out of it's master's sight. It answers his call, and retires when he commands : in which last case, it discovers anxiety, often looking back for the sign of invitation. It is exceedingly neat ; and all it's motions are graceful, delicate, and pleasing. It feeds on fruits, pulse, all the farinaceous grains, pastry, eggs, milk, and whatever is sweet, if not too sugary."

The *Psittacus Cristatus* of Linnæus, which seems to be the other branch, or variety, of this species, is said to be eighteen inches in length, being about four inches longer than our Yellow-Crested Cockatoo.



GREAT LANTHORN FLY.

Published, Jan. 20, 1790, by Garrison, Newgate-street, London.



GREAT LANTHORN-FLY.

OF that very curious family of insects, the Lanthorn or Fire Flies, there are several species. Their generical character is thus described by naturalists—The head, which is hollow, is inflated, and produced forwards ; the antennæ, which are situated below the eyes, consist of two joints, the exterior being largest and globose ; the beak is inflated ; and, though a winged insect, it has feet formed for walking.

The luminous appearance of certain insects, in consequence of their possessing a phosphoric light, may be classed among the most wonderful phænomena of nature.

In Europe, the Glow-Worms, which belong to the Coleopterous tribe, in the Linnæan genus *Lampyris*, afford the most remarkable instances of this singular property. A large species of Elater, or Springing Beetle, in America, has this quality in a very extraordinary degree : and the common Small Scolopendra

GREAT LANTHORN-FLY.

dra of Europe, well known in this country, is found to be also considerably phosphoric ; particularly, when pressed or irritated.

None of these, however, are at all comparable with the Great Lanthorn-Fly of Peru, as this fine insect is usually denominated, though by no means peculiar to that part of America. This wonderful insect, which possesses uncommon beauty, is the *Lanternaria* of Rosël and Madame Merian ; and was originally figured by that ingenious lady, in her celebrated History of the Insects of Surinam. It is the *Fulgora* with a large oval head ; having variegated wings, the lower pair of which are ocellated.

This Fire-Fly belongs, naturally, to the order of Hemipterous Insects ; or such insects as are furnished with four wings, the exterior or upper pair of which are of a stronger or more coriaceous nature than the lower or under wings. The peculiar division, in this tribe, to which it more particularly appertains, is that of the Rostrated Insects ; or such as have a tube, or instrument of suction, lying flat

flat beneath the breast: it seems, therefore, to hold a not very distant affinity with the genus Cicada.

The Great Lanthorn-Fly is common in many parts of South America; and it is said to afford a light so extremely vivid, that travellers may pursue their journey, during the darkest night, with sufficient certainty, by merely carrying one or two of these insects tied to a stick in the manner of a torch. Even some of the smaller species of Fire-Flies, in America, as well as in China and other parts of Asia, where they also occur, are reported to possess a sufficient portion of this luminous or phosphoric effulgence, for any book to be read, in the night, near which a few of them are placed.

Madame Merian gives a curious account of her alarm, on first perceiving the flashes of light which were emitted from a number of these Great Lanthorn-Flies confined in a dark situation, before she had been apprized of their luminous nature.

“ The

“ The Indians,” says this lady, “ once brought me, before I knew that they shone by night, a number of these Lanthorn - Flies, which I shut up in a large wooden box. In the night, they made such a noise, that I awoke in a fright, and ordered a light to be brought ; not being able to guess from whence the noise proceeded. As soon as we found that it came from the box, we opened it ; but were much more alarmed, and instantly let it fall to the ground, with affright, on perceiving flames of fire issue out of it : for, as many animals as came out, so many flames of fire appeared. When we found this to be the case, we recovered from our terror, and again collected the insects, much admiring their splendid appearance.”

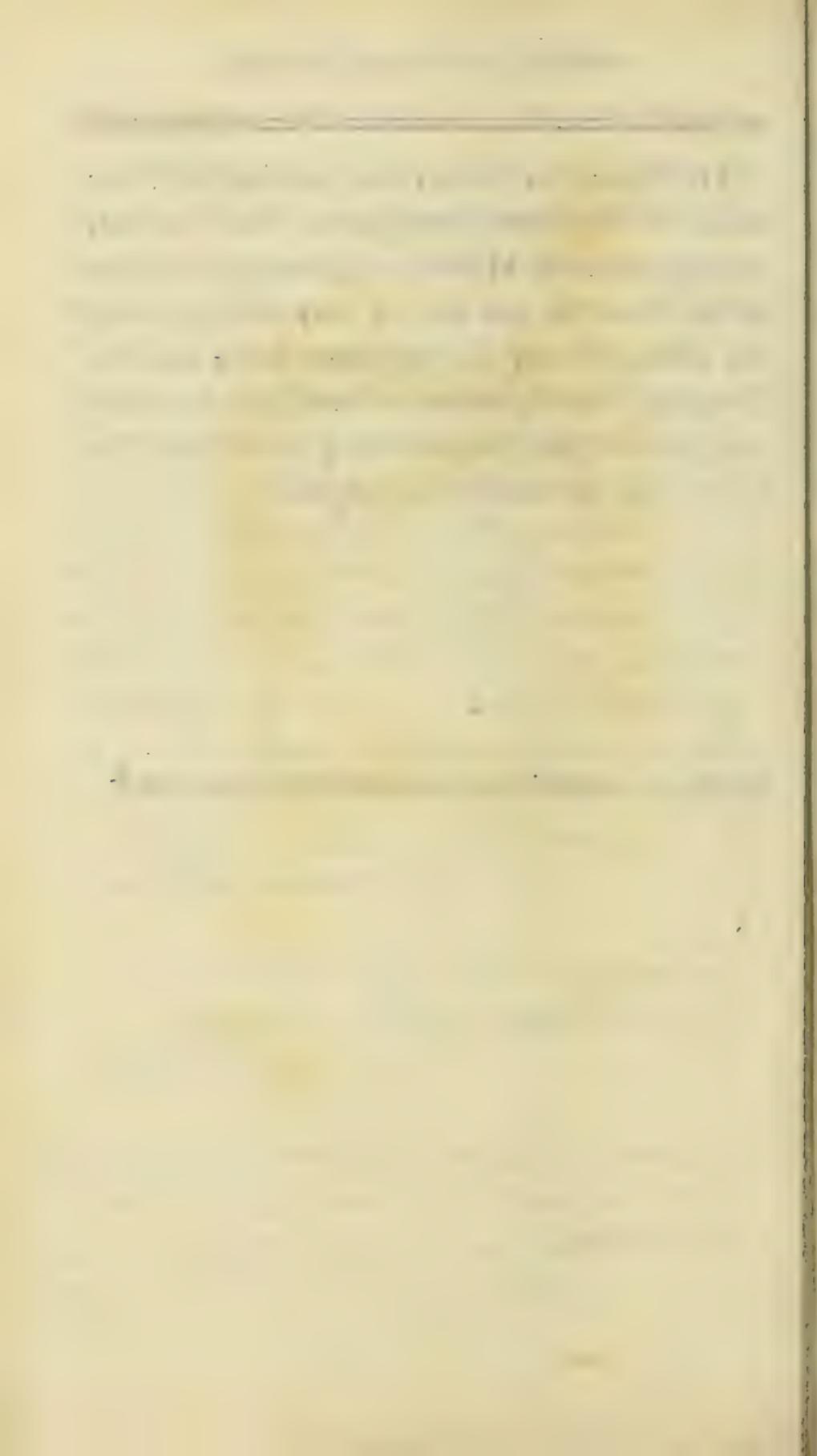
Madame Merian adds, that the light which one of these insects affords, is sufficient for any person to read by.

The phosphoric light dispensed by this wonderful insect, proceeds wholly from the hollow part, or lanthorn, of the head, no other part being in the smallest degree luminous.

Dr.

GREAT LANTHORN-FLY.

Dr. Shaw, to whom we are indebted for much of the above description, observes that, though Madame Merian has given good figures of the Fire-Fly, she yet, by way of explaining the change from it's supposed larva into the compleat insect, seems to have introduced an imaginary figure, representing the Cicada Tibicen with the head of a Fulgora.





PERSIAN LYNX.



Published by George Harwood (No. 3, Highgate, near York)

PERSIAN LYNX.

THIS animal is the *Felis Lynx Caracal*, of Linnæus; the *Caracal*, of Buffon; the *Siyah-Ghush*, of Ray and Klein; and the *Persian Lynx*, of Pennant. In the Turkish language, it is called *Karrah-Kulak*; in Arabic *Gat el-Challah*; in Persian, *Siyah-Ghush*: these denominations, in those three languages, being said to signify, “the Cat with black Ears.” Mr. Bruce, however, assured Buffon, that *Gat el-Challah*, means “the Cat of the Desart.” According to some travellers, it is also called the *Lion’s Provider*, or *Guide*.

Pennant, whose figure we have copied, which was originally drawn by Edwards, describes the *Persian Lynx* as having a lengthened face; a small head; and long, slender, black ears, terminated with a long tuft of black hairs. The nose, and the insides and bottoms of the ears, are white. The eyes are small. The upper part of the body is of a pale reddish brown colour; the tail is rather darker and the breast, and belly, are whitish. The limbs

limbs are strong, and pretty long. The tail is about half the length of the body.

It inhabits Persia, India, and Barbary; but Pennant observes that, according to Dr. Shaw, the mouth of the Barbary variety is black, and the face fuller. He adds, that these animals are often brought up tame, and used in the chace of lesser quadrupeds, and the larger sort of birds; particularly, Cranes, Pelicans, Peacocks, &c. which they surprise with great address. When they seize their prey, they hold it fast in their mouths, and lie for a time motionless on it. They are said, by Thevenot, to attend the Lion, and to feed on the remains of the prey which that animal leaves. This traveller says, that the Arabs call them Kara-Coulacs, or Black Ears. We learn, however, from Dr. Thomas Hide's Ulugh Beigh, that the Arabian writers describe them by the name of Anak eld Ard: and say, that it hunts like the Panther; jumps up at Cranes as they fly; and even covers it's steps when hunting. Dr. Charleton, who calls it the Siyah-Ghush, informs us, that he saw one of these animals fall on a Hound, which it killed and tore to pieces

pieces in a moment, notwithstanding the Dog defended itself to the utmost: so fierce are they, when provoked.

This account, which comprehends all that is collected by Pennant, affords not the smallest intimation of the size of the animal; which, however, with other interesting particulars, will appear in the more copious description which is given of it by Buffon, under the appellation of the Caracal.

" Though," says Buffon, " the Caracal resembles the Lynx, in size, figure, aspect, and the pencil of black hair on the tips of the ears; we are of opinion, from the disparities between these two animals, that they belong to different species. The Caracal is not spotted like the Lynx; his hair is rougher, and shorter; his tail is longer, and of a uniform colour; his muzzle is also more lengthened; his aspect is less mild; and his disposition is more feroelous. The Lynx inhabits cold or temperate climates only: but the Caracal is never found, except in warm countries. It is from these differences of dispositions and climate, that we have

have referred them to different species; as well as from the inspection and comparison of the two animals, both of which we have examined, and drawn from the life.

“ This animal is common in Barbary, in Arabia, and in all the countries inhabited by the Lion, the Panther, and the Ounce. Like them, he lives on prey; but, being smaller and weaker, it is with difficulty that he procures subsistence, and is generally obliged to be contented with what they leave. He keeps at a distance from the Panther, because that animal exercises its cruelties after being fully gorged with prey: but he follows the Lion; which, after a full repast, never injures any creature. The Caracal feasts on the offals of the Lion’s table; and, sometimes, follows or goes before him, at no great distance: having nothing to apprehend from his rage; because he is unable, like the Panther, to pursue the Caracal to the tops of the tallest trees. For all these reasons, the Caracal has been called the Lion’s Guide, or Provider. The latter, whose smell is not acute, employs the former

to

to scent animals at a distance, and rewards him with a part of the spoil.

“ The Caracal is about the size of a Fox; but much stronger, and more ferocious. He is extremely difficult to tame: however, when taken young, and reared with care, he may be trained to hunting; an employment of which he is naturally fond, and in which he is very successful: especially, if he be never let loose on any animal that is not his inferior in strength; for he loses his courage, as soon as he perceives real danger. In India, he is employed for catching Hares, Rabbits, and even large birds; which he surprises, and seizes, with singular address.”

From the *Voyage d’Orient* of Père Philippe, Buffon gives the following note— “ I saw an animal in an iron cage, which the Arabs call the Lion’s Guide. It has so strong a resemblance to a Cat, that it has been called the Cat of Syria; and I saw another of them at Florence, which went under the same name. He is so fierce that, if any person attempts to take meat from him, he becomes perfectly furious; and, if not appeased, springs instantly on

on the spoiler. There are small tufts of hair on the summits of his ears; and he is called the Lion's Guide, because the latter is said to be deficient in scent. But, when attended by the Caracal, which has a very acute nose, he follows his prey, and rewards his conductor with a share." He adds, from Dr. Shaw's Travels, that "the Gat el Challah, Siyah-Ghush, or Karrah-Kulak, i. e. the Black Cat, or Black-Eared Cat, as the Arabic, Persian, and Turkish, names signify, is of the bigness and shape of a Cat of the largest size. The body is of a reddish brown; the belly of a light colour, and sometimes spotted; the chaps are black, the ears of a deep grey, with the tips of them distinguished by small tufts of black stiff hair, as in the Lynx. The figure given of this animal by Charleton, is not so full in the chaps as the Barbary Siyah-Ghush." On this, Buffon remarks, that "the figure given by Charleton does not represent the hair properly;" and, that "the head, which is bald, is deprived of it's roundness: however," concludes he, "the Siyah-Ghush of Charleton, and that of Barbary mentioned by Dr. Shaw, belong to the same species with our Caracal."

In the supplement to this article, Buffon mentions, that Mr. Bruce saw, in that part of Nubia formerly called the Island of Meroe; a Caracal which differed in some respects from that of Barbary. The face is rounder; and the ears black on the outside, but interspersed with silver-coloured hairs. He has the Mule cross on his withers, like most of the Barbary Caracals. On the breast, belly, and inside of the thighs, there are small bright yellow spots, and not blackish brown, as in the Barbary Caracal. These are only slight varieties, the number of which might be still augmented; for we find, in Barbary, or rather in Lybia, near the ancient Capsa, a Caracal with white instead of black ears. The pencils of these white-eared Caracals are thin, short, and black. They have a white tail, the extremity of which is surrounded with four black rings; with four black patches on the hind part of each leg, like the Nubian Caracal. They are also smaller than the other Caracals, not exceeding the size of a Domestic Cat. The ears are white within, and covered on the outside with bushy hair of a lively red colour. If this difference in size were constant, it might be alledged, that there

PERSIAN LYNX.

are two species of Caracals in Barbary : the one large, with black ears, and long pencils ; the other smaller, with white ears, and very short pencils. It appears, likewise, that those animals, which differ so greatly in their ears, are equally diversified in the form and length of the tail, as well as in the height of the legs; for Mr. Edwards has sent us the figure of a Caracal from Bengal, whose tail and limbs are vastly larger than the common kind."





CROWNED EAGLE.

Published 1st Oct 1799 by Kessinger. Price 12/- Post Free

CROWNED EAGLE.

THIS fine bird, which was originally figured by Edwards, is the *Falco Coronatus*, of Linnaeus and Gmelin; the *Aquila Africana Cristata*, of Brisson; and the Crowned Eagle, of Edwards, Latham, and other ornithologists.

It inhabits, chiefly, the Coast of Guinea; and, according to Edwards, is about a third part less than the larger sort of Eagles which we see in Europe, but appears to be strong and bold like other Eagles.

“ The bill,” says Edwards, “ and the skin that covers the upper mandible, in which the nostrils are placed, are of a dusky-brown colour. The corners of the mouth are cleft in pretty deep under the eyes, and are of a yellowish colour. The circles round the eyes are of a reddish orange-colour. The fore-part of the head, the space round the eyes, and the throat, are covered with white feathers with small black spots. The hinder part of
the

CROWNED EAGLE.

the head and neck, the back and wings, are of a dark brown or blackish colour, the outer edges of the feathers being of a light-brown. The quills are darker than the other feathers of the wings. The ridge in the upper part, and the tips of some of the lesser covert-feathers of the wings, are white. The tail is of a brown colour, barred across with black; and, on it's under side, appears of a dark and light ash-colour. The breast is of a reddish brown, with large transverse black spots on it's sides. The belly, and covert-feathers under the tail, are white, spotted with black. The thighs, and legs, down to the feet, are covered with white feathers, beautifully spotted with round black spots. The feet and claws are very strong. The feet are covered with scales of a bright orange-colour; the claws are black. It raises the feathers on the hinder part of the head in the form of a crest, or crown, from which it takes it's name."

Edwards observes, that he saw this bird alive, in 1752, at Bartholomew Fair, where he made a drawing of it. The keeper told him, that it came from the Coast of Guinea; which account

CROWNED EAGLE.

account he was induced to believe, from having been afterwards confirmed in it, by Mr. Penwold, a gentleman who lived on Garlick Hill, London; where he also saw two others of this very species brought from Guinea.

Barbot, in his description of Guinea, mentions a bird which he calls the Crowned Eagle. All he says of it is as follows— “Eagles are not wanting; nor do they differ from those we have in Europe, yet some are not altogether like them: the print represents one of this latter sort; which is pretty scarce to be found any where, unless in the province of Acra, and is there called the Crowned Eagle.”

It is remarked, by Edwards, that “nothing can be determined from what Barbot says of this bird, without his print referred to, which has the crest raised on the head, much in the same manner as it appears in my figure. Barbot’s figure is very rude, and incorrect, having no marks or spots. Astley, in his Collection of Voyages, Vol. II. has given Barbot’s description and figure of the same bird: but, as very little knowledge of this bird has been gained

CROWNED EAGLE.

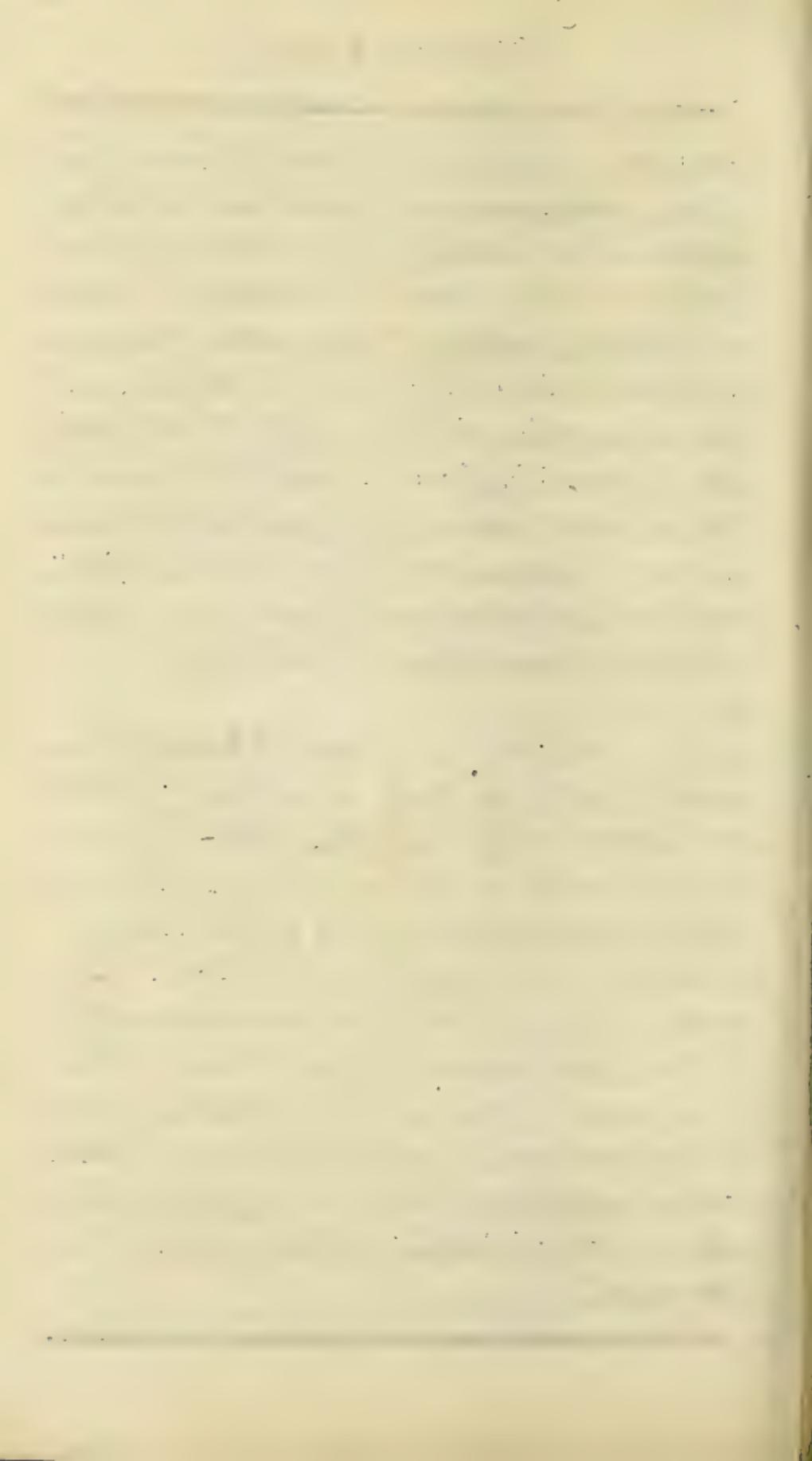
gained by the above mentioned figure and name, I consider it as a bird that, till now, has neither been figured nor described."

Buffon, in his account of Foreign Birds related to the Eagles and Ospreys, seems to think the Crowned Eagle of the same species as the Urutaurana of Brasil, or Ysquauthli of Mexico, called by European travellers the Oronooco Eagle. He observes that, of the Crowned Eagle, "Edwards gives an elegant coloured figure, and an excellent description. The distance," he adds "between Brasil and Africa, which scarcely exceeds four hundred leagues, is not too great a journey to be performed by a bird of an aerial flight; and, therefore, it is possible that it may be found on both coasts. The characters are sufficient to decide the identity of the species: both have a sort of crests, which they can depress at pleasure, and both are nearly of the same size. In both, the plumage is variegated, and similarly marked with spots; the iris is of a bright orange; the bill is blackish; the legs are covered to the feet with feathers, marked with black and white; the toes are yellow; and the claws are brown

or

or black. In short, the sole difference consists in the disposition of the colours, and in the shades of the plumage; which bear no comparison to the points of conformity. I shall not hesitate, therefore," adds Buffon, "to consider the birds of the Coasts of Africa, as of the same species with that of Brasil; and, that the Crowned Eagle of Brasil, the Oronooco Eagle, the Peruvian Eagle, and the Crowned Eagle of Guinea, are all the same individual, and have the nearest resemblance to the Spotted or Rough-Footed Eagle of Europe."

In a note, by the translator of Buffon's Natural History of Birds, it is observed, that "Linnæus ranges this bird—[the Oronooco Eagle]—with the Vulture; Gmelin, with the Falcon; and both apply the epithet *Harpyia*: Latham calls it, the Crested Vulture. It is said to cleave a Man's skull with one stroke of its bill, and to be as large as a Ram. There is a variety of this in New Grenada, which has a black crest, a white belly, thighs spotted white, and the tail, which is long, variegated with white and black. When young, it can be tamed."







MINIUS DRAGON FLY.

Scientific Name: *Minius* (1758). Test. Ind.

MINIUS DRAGON-FLY.

THIS small, but beautiful, species of the Dragon Fly, or *Libellulæ* of Linnæus, is denominated the *Minius*; and was, we believe, first figured by the late ingenious Mr. Moses Harris, who has thus described the Male and Female here represented.

The nose of the Female, which is of a pale greenish brown, has two black streaks parallel to each other, as well as to the chaps beneath, which are also black. The upper parts of the larger eyes are of a fine golden or copper colour. The crown of the head is of a dark olive. The thorax is of a very deep green, having two stripes of yellow on each side. The wings are a little tinged with a pale greenish brown. The several portions of the abdomen are as red as blood; and they are divided, or separated, with one ring of black, and another of yellow. There is, also, a small black line down the upper part, from the thorax to the anus.

MINIUS DRAGON-FLY.

The Male is like the Female, in the head, thorax, and wings; but the abdomen of the former is red. At the joint of each annulation, there is, also, a fine black ring, as if separated with the stroke of a pen. Towards the end, or anus, are three black spots; one of them large, and the two others small. The stripes on the thorax are red.

They were taken together, at the latter end of the month of April; and, though natives of Great Britain, do not appear to be very common.

The figures are of the natural size; being about an inch and a half long. The Female, as usual, is largest. Their three eyes are placed in a triangular form on the crown of the head; and the wings are closed when the insect is at rest.





VICUGNA.

Precious Metal, a quarterly journal of Gold & Silver, Gold

VICUGNA.

THIS animal, the *Camelus Vicugna*, of Linnaeus and Gmelin; is the *Ovis Chilensis* of Dampier's, Wood's, and Narborough's Voyages; the *Vicunna*, *Alpaques*, of Frezier's and of Ulloa's; the *Vigogne*, of Molina; the *Camelus Laniger*, of Klein; the *Camelus Vigogne*, of Brisson; and supposed, by Buffon, to be the *Pacos* in it's wild state. By other naturalists, it is called the *Vicuna*, or *Vicunna*.

Pennant, who uses the latter appellation, says that the body is covered with long and very fine wool, of the colour of dried roses; the belly being white. In a tame state, he observes, the colour varies. It is shaped like the *Llama*, but is much less; the leg of one seen by him was about the size of that of a *Buck*.

These animals, like the *Llama*, inhabit the highest and most precipitous peaks of the Andes, in South America; and, more particularly, they abound in the Chilese provinces of Coquembo and Copiapo. The *Vicugnas*, however,

ever, are more capable of supporting the rigours of frost and snow. They live in vast herds; are very timid; and excessively swift. The Guanacoes sometimes associate with them. The wool, which is very valuable, both in Chili and in Europe, is prodigiously fine, silky, and easily dyed. The flesh is said to be excellent eating. The Indians take this animal in a strange manner. They tie cords, with bits of wool or cloth hanging to them, above three or four feet from the ground, across the narrow passages of the mountains; then, driving the Vicugnas towards them, the creatures are so terrified by the flutter of the rags, that they dare not approach them, but huddle together, and give the hunters an opportunity of killing, with their slings, as many as they please.

Pennant asserts, that these animals are not yet domesticated: forgeting, as it should seem, the remark which he had before made, that these animals, "in a tame state, vary in colour." Other authors have said, that they are tamed with great difficulty; which, we conceive, is the fact.

They

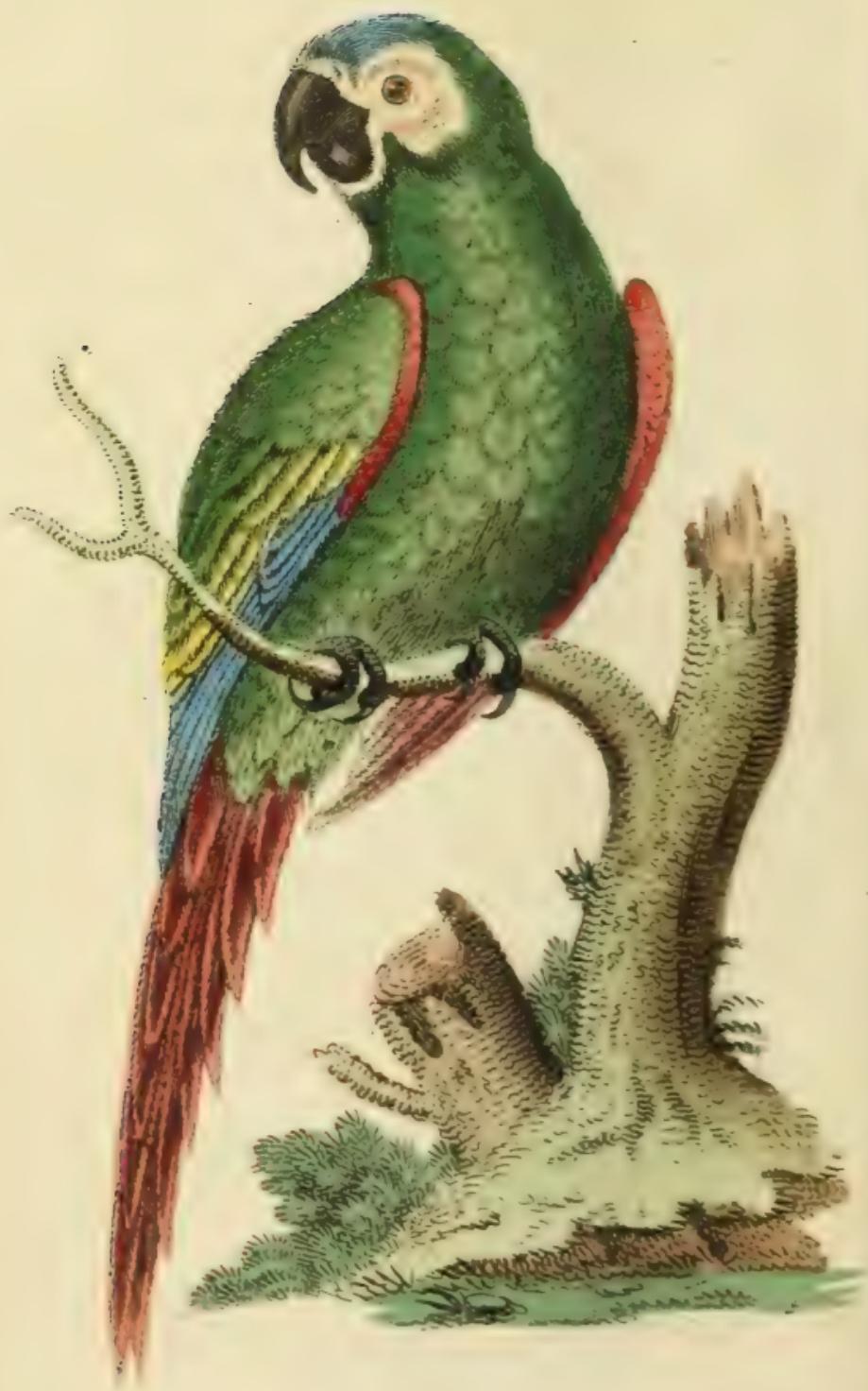
They yield Bezoars. Wafer says, that he has taken thirteen out of the stomach of a single animal: they were ragged, and of several forms; some round, some oval, and others long. They were at first green, but changed to an ash-colour.

In Pennant's account of the Pacos, he says, "these animals are found on the mountains of Peru in a state of nature, as well as the Vicunna, but never mix together. This destroys the opinion M. De Buffon had, that the Pacos and Vicunna were the same animal, and that the first was only a Wild Vicunna. Father Molina satisfies us of that mistake: he, besides, adds three more of American Camels to the two we were before acquainted with. That gentleman was a Jesuit, resident in South America, who had formed great collections in Natural History. When the order was expelled out of the New World, the Spaniards deprived him of every thing. By a strange accident, on his return—(I think, to Bologna, his native place)—he recovered one of his Manuscripts, which was translated out of the Italian into French, under the title of "Essai

VICUGNA.

sur l'Histoire Naturelle du Chili," and published at Paris, in 1789, in octavo. It is a choice and instructive work; which gives us great reason to regret the loss of the rest of his labours."





BRASILIAN GREEN MACAW

Published, 1817, by Harrison Clare, & C. No. 18 Fleet Street.

BRASILIAN GREEN MACCAW.

THIS fine bird, which was figured by Edwards, is the *Psittacus Severus*, of Linnæus and Gmelin; the *Ara Brasiliensis Viridis*, and *Ara Brasiliensis Erythrochlora*, of Brisson; the *Maracana*, of Ray and Willughby; the *Green Ara*, of Buffon; and the *Brasilian Green Maccaw*, of Edwards and Latham.

It is described by Edwards as “ of the size of a Tame Pigeon; or the Ash-Coloured Parrot with a Red Tail, such as is brought from Guinea, on the Coast of Africa. It has a pretty strong bill, with a hook, and angles on the sides of the upper mandible. The nostrils are placed in a white skin, which passes round the base of the bill. On each side of the head, it has a broad bare space of skin, of a whitish colour, thinly beset with very small black feathers; in these spaces the eyes are placed, having gold-coloured or yellow irides, with black pupils. The feathers on the forehead, next the base of the bill, are black. The top of the head is blue, which gradually becomes green on the neck. It has also a black

spot

spot on each side of the lower mandible of the bill, which ends in points upwards. All the neck and body, both above and beneath, is green. The wings without-side are also green; except the greater quills, and some of the first row of covert-feathers that fall over them, which are of a fine blue. The quill-feathers next the back are of a yellow green. The ridge of the wing, in the upper part round the joint, is red. The insides of the wings are red; except a little sprinkling of faint green in the lesser covert-feathers. The tail-feathers, on the upper side, have their webs green towards their bottoms, which gradually become blue at their tips: the outer webs of the two outer feathers are blue their whole length. There is a little redness next the shafts in all the feathers. The under side of the tail is wholly red. It is composed of twelve feathers, narrow at their ends: the middle feathers are long; gradually shortening to the outermost on each side, which are the shortest. The legs and feet are covered with a black scaly skin. The toes stand two forwards, and two backwards, as in others of the Parrot kind, of which this is a species. The claws are black

and

and strong. Between the green feathers on the thighs, and the black skin of the legs, are placed rings of scarlet feathers, which the action of the printed figure doth not give leave to shew.

" This bird," remarks Edwards, " has not till now been figured, though it has been pretty well described by Marcgrave. (See Piso's Natural History of Brasil.) He says, that it's cry is " Oe, Oe, Oe." Our countryman, Mr. Willughby, in his Ornithology, has given us an English translation of Marcgrave's description: it is his Second Maracana.

Edwards adds—" My original is drawn after nature, of the size of life; though reduced, in order to bring it into the copper-plate. It was (A. D. 1752.) the property of the Right Honourable the Lord Carpenter, who was so good as to lend it me, to make a drawing of it. Sir Hans Sloane seems to hint, that his Small Maccaw, mentioned in his History of Jamaica, is the same with the above described: though, I think, if it were a native of Jamaica, we should see it more common in England, where

BRASILIAN GREEN MACCAW.

it is very rare ; for I have only seen this one, in my searches after foreign animals."

In conformity with this idea of Edwards, Buffon commences his account of this bird, his Green Ara, with observing that it is much rarer, as well as smaller, than the Red and the Blue Aras, or Maccaws. It consists, he asserts, of only one species : though nomenclators have divided it into two; because they confound it with the Green Parroquet, which they call the Ara Parroquet, on account of the length of it's tail, and it's distinctly articulating the word "Ara." But, notwithstanding these properties, it is still a Parroquet, and very common in Cayenne ; whereas the Green Ara is there altogether unknown. Sloane says, that the Little Maccaw, or Little Green Ara, is very common in the woods of Jamaica. But Edwards properly observes, that this is certainly a mistake ; "because, though he made several applications, he could procure none from his correspondents in that island. Perhaps," adds Buffon, "Sloane confounded the Long-Tailed Green Parroquet with the Green Ara."

The

The reader, who has seen what Edwards really says on the occasion, will perceive that Buffon does not always quote with any great regard to accuracy.

"We had," continues Buffon, "a Green Maccaw alive. It was presented by M. Sonini De Manoncour; who procured it, at Cayenne, from the savages of Oyapoc, where it was caught in its nest. Its length, from the tip of the bill, to the end of the tail, is about sixteen inches. The body, both above and below, is green; which, according to the position, is golden and sparkling, or deep olive. The great and small quills of the wing are beryl blue, on a brown ground, and the under-side copper-coloured. The under side of the tail is the same; and the upper side painted with beryl blue, melting into olive green. The green on the head is brighter and less mixed with olive than that on the rest of the body. At the base of the upper mandible, on the face, there is a black border of small linear feathers that resemble bristles. The white naked skin that surrounds the eyes, is sprinkled with small pencils of the same black bristles, ranged in rows. The iris of the eye is yellowish.

"This

“ This bird is as beautiful as it is rare; and it is still more amiable for it's social temper and gentle disposition. It soon grows familiar with persons whom it sees frequently, and is pleased to receive and repay their caresses. But it has an aversion to strangers; and, particularly, to children, and flies at them furiously. Like all other domesticated Parrots, it clings to the finger when presented. It also clasps wood. But, in winter—and even in summer, when the weather is cool and rainy—it prefers the arm, or the shoulder: especially, if the person have woollen cloaths; for, in general, it likes warm stuffs. It is also fond of kitchen stoves, when they are cooled so much as to retain only a little gentle warmth. For the same reason, it avoids sitting on those hard bodies which suddenly communicate cold; such as iron, marble, glass, &c. and, during cold rainy weather, though in summer, it shudders, and trembles if water be thrown on it. However, in sultry days, it bathes of it's own accord, and often dips it's head in the water. On it's being stroked gently, it spreads it's wings, and squats. It then utters it's disagreeable cry, which resembles the chatter of the Jay: raising it's wings during the action,

action, and bristling it's feathers: and this habitual cry seems to express either pleasure or languor. Sometimes it has a short shrill cry, which is less equivocal than the former, and denotes joy and satisfaction, for it is generally addressed to persons whom it loves: yet this cry also marks it's impatience, it's fits, and it's pettish gusts of ill-humour. But it is impossible to be precise on this subject; for birds organized like the Parrots perpetually vary or modify their voice, as they are prompted by imitation.

“ The Green Ara is jealous. It is fired at seeing a young child sharing in it's mistress's caresses and favours: it tries to dart at the infant; but, as it's flight is short and laborious, it only shows it's displeasure by gestures and restless movements, and continues tormented by these fits till it's mistress is pleased to leave the child, and take the bird on her finger. It is then overjoyed; murmurs satisfaction; and, sometimes, makes a noise exactly like the laugh of an old man or woman. Nor can it bear the company of other Parrots; and, if one be lodged in the same room, it will strive to deprive it of every comfort. It would appear, therefore,

therefore, that the bird can suffer no rivals whatever in it's mistress's favour, and that it's jealousy is founded on attachment: accordingly, it takes no notice, when it sees an indifferent person fondle a child.

" It eats nearly the same things that we do. It is particularly fond of bread, beef, fried fish, pastry, and sugar; but it seems to prefer roasted apples, which it swallows greedily. It cracks nuts with it's bill, and picks them dextrously with it's claws. It does not chew the soft fruits; but sucks them, by pressing it's tongue against the upper mandible: and, with respect to the harder sorts of foods, such as bread, pastry, &c. it bruises or chews them, by pressing the tip of the lower mandible on the most hollow part of the upper. But, whatever be the nature of it's food, it's excrements are always green, and mixed with a sort of white chalky substance, as in most other birds; except when it is sick, and then they assume an orange or deep yellow cast.

" Like all the other Parrots, the Green Ara uses it's claws with great dexterity. It bends forward the hind toe, to lay hold of the fruits and other morsels which are given to it, and to carry

carry them to it's bill. The Parrots, therefore, employ their toes nearly as the Squirrels or Monkeys. They also cling and hang by them. The Green Ara almost always sleeps in this way, hooked to the wires of it's cage. There is also another habit common to the Parrots ; viz. they never climb, or creep, without fastening by the bill, with which they begin, and use the feet only as a second point of their motion.

" The nostrils are not visible in this Ara, as in most of the other Parrots. Instead of being placed in the uncovered part of the horn of the bill, they are concealed in the first small feathers that cover the base of the upper mandible, which rises and forms a cavity at it's root when the bird makes an effort to imitate difficult sounds. In such cases, the tongue folds back at the tip, and recovers it's shape when it eats : a power not commonly possessed by birds which can only move it backwards or forwards in the direction of the bill. This little Green Ara is as hardy as most of the other Parrots, or even more so. It learns more easily to prattle, and pronounces much more distinctly, than the Red or Blue Aras. It listens to the other Parrots,

and

and improves beside them. It's cry is like that of the other Aras ; only it's voice is not nearly so strong, and does not articulate so distinctly the word " Ara."

" It is said, that Bitter Almonds will kill Parrots, but I am not certain of the fact : I know, however, that, Parsley, of which they are very fond, if taken even in small quantities, is very pernicious; as soon as they eat it, a thick viscous liquor runs from the bill, and they die in an hour or two.

" It appears," concludes Buffon, " that there is the same variety in the Green Aras as in the Red : at least, Edwards has described " a Great Green Maccaw," which is thirteen inches long, and fifteen to the middle feather of the tail. The face was red; the quills of the wing blue, and also the lower part of the back and the rump. Edwards calls the colour of the under surface of the wing and of the tail, " dull orange," and it is probably the same with that dull orange red which we perceived below the wings of our Green Ara. The feathers of the tail, in that of Edwards, were red above, and terminated by blue."



19 MAY 1915 2 REPTILES

19 MAY 1915 2 REPTILES



SMALL BLACK AND RED SNAKE.

THIS little Snake is seldom known to grow bigger than it is here represented, as originally figured by Edwards; to whom one of these Snakes was sent from Pennsylvania, by his friend Mr. Bartram.

" It's upper side," says Edwards, " except a white ring round the neck, is of a shining jet black; the belly, or under side, is of a fine bright red; and the eyes are of a flame-colour. These Snakes, which are thought to be inoffensive, are found in the crevices of rocks, old walls, and dried wood; where they prey on Beetles, Millepedes, Worms, &c. They are never seen abroad, to pursue their prey, as other Snakes do. They make no resistance when dislodged; but strive to escape, to secure themselves."

Another species, Edwards observes, - was sent with the above curious Snake, nearly agreeing with it, but a little bigger. It's upper side was chesnut-colour, the under side deep yellow. These two colours were divided on

the

SMALL BLACK AND RED SNAKE.

the sides, for it's whole length, by blue lines speckled with small black spots. It had a sort of collar of yellow spots round it's neck ; and the eyes were of a gold colour. The make of the whole animal agreed with the species figured ; and it was equally inoffensive.

“ Most Serpents,” says Edwards, “ are dreaded by Men, as poisonous and dangerous animals. It would, therefore, be highly expedient, by all the methods we can, to observe and discover, from certain experience, which of the species are hurtful, and which are not, and record them, in order to free mankind from unnecessary fears.”

A paper, read before the Royal Society, in March 1762, mentions two instances of persons bitten by the Slow-Worm, or Blind-Worm, without receiving any harm ; though the Worms fastened and hung to their hands, and blood followed the bites. This Worm is vulgarly thought venomous, and it's bite pretended to be mortal.





TAIL LESS MACCAUCO

— Published November 1799 by Harrison Clark & C. H. 12. Net. 1000 —

TAIL-LESS MAUCAUCO.

A Considerable degree of confusion prevails in the accounts given by naturalists of this animal. It is generally held to be a Maucauco ; but some seem to consider it rather as a species of the Sloth, and many incline to admit it's affinity with that animal. Of this latter opinion, appears the great Linnæus ; by whom it is denominated, Lemur Tardigradus. It is the Animal Elegantissimum, of Ray; the Cercopithecus Ceylonicus, seu Tardigradus dictus Major, of Seba ; the Simia Unguis Indicis Pedum posteriorum longis, incurvis, et acutis, of Brisson, and of the Leverian Museum ; and the Lemur Ecaudata, or Tail-less Maucauco, of Pennant and most other modern naturalists.

Were we inclined to enter into all the particulars of the various opinions entertained by different naturalists respecting this animal, many of whom never beheld it, we might probably increase the confusion which already exists : certain we are, that there is not, for
15 readers

TAIL-LESS MAUCAUCO.

readers in general, any chance of additional information, by excusing into such endless discussions on facts not to be compleatly ascertained. It may be sufficient for our purpose, to describe faithfully the object which we have represented in the annexed figure; this, therefore, we shall do, as given by Pennant, who was acquainted with the animal, and whose ability to describe, with accuracy, objects which he beheld, will not be questioned by any person in the smallest degree acquainted with the merits of that indefatigable naturalist.

The Tail-less Maucauco, this gentleman says, has “a small head; a sharp-pointed nose; and orbits surrounded with a black circle, the space between them being white. From the top of the head, along the middle of the back, to the rump, is a dark ferruginous line; which, on the forehead, is bifurcated. The ears are small. The body is covered with short, soft, and silky, ash-coloured and reddish fur. The toes are naked, and the nails are flat: those, however, of the inner toe, on the hind foot, being long, crooked, and

and sharp. The length, from the nose to the rump, is sixteen inches."

This animal, according to Pennant, inhabits Ceylon and Bengal. It lives in the woods, and feeds principally on fruits; but it is fond of eggs, and will greedily devour small birds. It has, he observes, the inactivity of the Sloth; creeps slowly along the ground; is very tenacious of its hold; and makes a plaintive noise: but he insists that, notwithstanding its manners, it cannot be ranked with the Sloth, having both cutting and canine teeth; and notices a misrepresentation of this passage by Mr. Schreber, which he doubts not that the candour of that gentleman will induce him to rectify.

"The inhabitants of Bengal," adds Mr. Pennant, "call this animal Chirmundi Billi, or Bashful Billy. It sleeps," concludes he, "as I have seen one do in London in this year—[the date of his Preface is December 1792.]—holding fast the wires of the cage with its claws. It makes [he repeats] a plaintive noise, "Ai, Ai." Its tongue is rough."

In

In Smellie's translation of Buffon, the description of our Tail-less Maucauco is very erroneously transferred to the Loris, or Tail-less Maucauco, of Buffon, which is a different animal of not more than half the size ; being, in fact, the Loris, of Schreber, Buffon, Pennant, and the Leverian Museum. This is the more extraordinary, as Pennant, in the description quoted by Mr. Smellie, and which the reader has seen, expressly says, that his Tail-less Maucauco is sixteen inches from the nose to the rump ; while the account of Buffon's Loris, to which it is thus strangely annexed, positively says, that animal is "not the size of a man's hand."

As this blunder may appear very extraordinary, we shall extract the whole of that part of Buffon's description of the Loris, which he has taken from Thevenot, and in which the size occurs. The reader will then see, that there are other obvious differences between the two animals ; though Pennant, and other naturalists, admit the Loris to be a species of the Maucauco, which Buffon absolutely denies.

The

The passage above alluded to, from the "Relation de Thevenot," is as follows.

"The Loris," says Buffon, "appears to be the same animal of which Thevenot speaks in the following terms—“I saw, in the Mogul country, Apes which had been brought from Ceylon. They were much esteemed, because they exceeded not the size of a man's hand, and were of an uncommon species. Their front was flat; their eyes large and round, and of a bright yellow colour, like those of certain Cats. Their muzzle is very sharp, and the inside of their ears is yellow. They have no tail. When I examined them, they stood on their hind-feet, often embraced each other, and looked stedfastly at the people without being afraid.”

The error is, perhaps, to be ascribed to the name “Tail-less Maucauco:” as if, indeed, there were only one species of the Maucauco without a tail; whereas, in fact, besides the Loris, the Indri, or Man of the Woods, described by Sonnerat, and classed among the Maucaucos by Pennant, has no tail.

It might seem to be reasonably objected, that, the name Tail-less Maucauco is improperly appropriated to any one species, while there are others which equally want that appendage: but, before we admit the full force of this objection, it will be necessary to consider, that our Tail-less Maucauco had obtained it's name when naturalists were unacquainted with the Indri; and, with respect to the smaller animal, it seems, by universal consent to be denominated the Loris, or Loris Maucauco. These names, therefore, being once given, great authority would be requisite to change them with advantage.

It is only from a due consideration of such circumstances, that the multiplied names of one and the same animal, in any single language, could possibly be endured, by learned and ingenious writers, or enlightened readers: but, reflecting on the causes which have naturally given rise to the evil complained of; and respecting which so much has been, and so much more might be, said to little purpose; they prudently acquiesce in what appears to be without any adequate remedy; and have
the

the liberality to excuse, though they cannot avoid perceiving, and sometimes mentioning, the many errors into which men of talents are thus frequently betrayed.

We mean, here, no particular application: there is not a single instance of any general writer of natural history who does not occasionally need this sort of indulgence; which all, therefore, may the more readily grant, as they must themselves more or less require it.

Buffon, we apprehend, has not at all noticed our Tail-less Maucauco.





BLUE-HEADED PARROT.

Published 21st Oct., 1858, by H. Colton & Son, 20, 21, & 22, Strand.

BLUE-HEADED PARROT.

THE Blue-Headed Parrot, we are told by Edwards, who first figured and described it, is about the size of the Blue Guinea Parrot with a Red Tail.

"The bill," says this accurate observer, "is of a dark or dusky colour; the upper mandible has a red spot on each side, and pretty deep angles on its edges; and the nostrils are placed in a narrow skin, pretty near together, at the basis of the upper mandible. The eyes are of a dark colour, surrounded with a bare skin of a small breadth, and of a flesh colour. The head, neck, and part of the breast, are covered with feathers of a fine ultramarine blue, a little tinged with purple on the breast; and, on each side of the head, is a black or dusky spot. The back, belly, thighs, and wings, are of a fine green colour. The covert-feathers of the wings are of a yellowish green, inclining to gold-colour; the inner coverts are greenish; and the coverts beneath the tail are of a fine scarlet.

The

The tail-feathers are of equal length; the middle ones green, gradually becoming blueish on the sides: the under side of the tail is of the same colour, but deader. The legs and feet are of a light ash-colour, covered with a scaly skin. The claws are dusky."

This very beautiful and rare Parrot was discovered by our ornithologist, in May 1761, hanging in a cage at the door of Mr. Haswell, a merchant, on the Point, at Portsmouth; "who," says Edwards, "though I was a stranger, kindly accommodated me with a room in his house, to take a sketch, and memorandums to finish my drawing. But he could not inform me of it's country: only, that the ship, by which he received it, came last from the Mediterranean; no part of the coasts of which, that I know of, produce any of the Parrot-kind. So it rests uncertain from whence it originally came, though I conclude this species to be very rare; as it is the only specimen I have met with, and not, till now, as I think, figured or described."

It appears to be the *Psittacus Menstruus*, of
Linnæus

Linnæus and Gmelin; and Latham has adopted the English name given to it by Edwards.

Buffon, who calls it “the Popinjay with a Blue Head and Throat,” informs us that it is found in Guiana, though rare; and it is, besides, as he says, little sought after, because it cannot be taught to speak.

His description, which is as follows, seems to have been taken from that of Edwards.

“The head, neck, throat, and breast, are of a fine blue, which receives a tinge of purple on the breast. The eyes are surrounded by a flesh-coloured membrane; whereas, in all the other Parrots, this membrane is white. On each side of the head is a black spot. The back, belly, and the quills of the wings, are of a handsome green. The superior coverts of the wings are yellowish green. The lower coverts of the tail are of a fine red. The quills of the middle of the tail are entirely green: the lateral ones are of the same green colour; but they have a blue spot, which extends the more, the

nearer

nearer the quills are to the edges. The bill is black, with a red spot on both sides of the upper mandible. The feet are grey..

"We have observed," adds Buffon, "that Brisson has confounded this bird with Edwards's Blue-Faced Green Parrot, which is our Blue-Headed Crick."

The specific character of our Blue-Headed Parrot, or the *Psittacus Menstruus* of Linnæus, as given in Buffon, is said to be, that "it is green: it's head blueish; it's vent black." But, in Kerr's Linnæus, it is stated to be "green; with a blueish head, and red ventlet."

Mr. Kerr says, that "this species, which is not very docile, and has the natural voice of a Jackdaw, is about the size of a Turtle-Dove. The head and neck are blueish, the feathers being brown, with blue tips. The back and wings are green: the wing coverts being yellowish green; and the wing quills green, with brown inner edges. The belly is green, the feathers having blueish tips. The tail

tail quills are green, with blue tips, the three outermost, on each side, having blue outer webs, and the inner webs being blood-red from the base to the middle. The ventlet is red, it's feathers having yellowish blue tips. The bill is horn-coloured, the sides of the upper mandible being tawny. The orbits are blueish hoary, and the eyes are black."

We suspect that, in the different accounts, different species may have been confounded. There are many birds of the Parrot kind, which have Blue Heads, as well as other similitudes to the Blue-Headed Parrot of Edwards; but we can rely, with the fullest confidence, that Edwards has delineated only what he beheld, and related only what he knew.

“I am a man of the world,
I have no time for you.
I am a man of the world,
I have no time for you.
I am a man of the world,
I have no time for you.
I am a man of the world,
I have no time for you.”

“I am a man of the world,
I have no time for you.
I am a man of the world,
I have no time for you.
I am a man of the world,
I have no time for you.”

“I am a man of the world,





CHINESE BLACK & YELLOW MOTH.

Published Novr. 1, 1799 by Morrison (late of the English East India Com.)

CHINESE BLACK AND YELLOW MOTH.

THIS handsome Chinese Moth was figured by Edwards. He calls it, beneath his figure, which we have exactly copied, the Black and Yellow Moth from China ; but, in his Catalogue of Names, he refers to it, as “ the Orange-Coloured Moth with Black Spots.”

It is represented of it's natural size; and the whole of Edwards's description is as follows—

“ The Moth is from China. The body, the under wings, and those parts of the upper wings next the body, are of a fine orange-colour, with black spots and marks, better explained by the print than they can be by words. The ends of the upper wings are of a purplish black, with white spots a little tinged with purple.

“ It has much the same colours on the under side, but fainter.

“ Matthew

CHINESE BLACK AND YELLOW MOTH.

" Matthew Harrison, Esq. son of Sir Thomas Harrison, Chamberlain of London, obliged me with this and some other Chinese Flies."





FELIDÆ, ZEBRA.

Natalus Novemmaculatus or *the Mountain Zebra*, of Africa.

FEMALE ZEBRA.

THOUGH, with the figure of Edwards, we have preserved the name under which he described this animal, there is some reason to believe, with Pennant and other late naturalists, that it may, in fact, be the Quagga of the Hottentots, and not strictly a Zebra.

As Edwards, however, could possess no documents on which to found such an idea, he stands very excusable, should it appear that he was mistaken: and, after all, this is, perhaps, very doubtful.

The description which accompanied his figure is as follows—" This curious animal," says Edwards, " was brought alive, together with the Male, from the Cape of Good Hope. The Male dying before they arrived at London, I did not see it; but this Female lived several years at a house of his Royal Highness the Prince of Wales, at Kew. For size, and shape, it is much like the Male Zebra. To speak

speak of it's general colour—exclusive of it's stripes, which are all black—the head, neck, upper part of the body, and thighs, are of a bright bay colour. It's belly, legs, and the end of the tail, are white. On the joints of the legs it had such corns as we see in Horses. The hoofs are blackish. The head is striped a little different from the last described—[which is our Male Zebra, taken also from Edwards.]—The mane is black and white; the ears are of a bay colour; it has a little white on the forehead; and several broad stripes round the neck, which become narrow on it's under side. It has a black list along the ridge of the back, and part of the tail, and another along the middle of the belly. The stripes on the body proceed from the list on the back; and some of them end in forks on the sides of the belly, others in single points, and these have some longish spots between them. The hinder part of the body is spotted in a more confused irregular manner. The two sides of this, as well as the Male Zebra, were marked very uniformly.

“ The noise it made,” continues Edwards,
“ was

" was much different from that of an Ass ; resembling, more, the confused barking of a Mastiff Dog. It seemed to be of a savage and fierce nature ; no one would venture to approach it, but a gardener in the Prince's service, who was used to feed it, and could mount on its back. I saw it eat a large paper of Tobacco, paper and all ; and I was told, that it would eat flesh, or any kind of food they would give it. I suppose, that proceeded from necessity, or habit, in its long sea-voyage : for it undoubtedly feeds, naturally, on much the same as Horses and Asses do ; I mean, on vegetables. I never saw a skin brought over agreeing with this, which makes it a much greater curiosity than the Male. I suppose, the skins of the Females are not counted so beautiful as those of the Males ; for which reason, they are not brought to us. The Female has not, till now, been figured or described."

To this Edwards merely adds—that Ludolphus, in his History of Ethiopia, or Abyssinia, describes the Zebra ; and says, it is taken in the woods of that country, but is there so rare that it is sold for a great price when made tame,
and

FEMALE ZEBRA.

and is esteemed a fit present for a sovereign prince—that Astley, in his Collection of Voyages, has collected together what many historians and voyagers have said on the Wild Ass, or Zebra—and, that he cannot find any certain account of the Zebra's being found in any part of the world but Africa; where it seems to be an inhabitant, from the extremest northern to the farthest southern parts.

Pennant, who inclines to think the Female Zebra of Edwards, what he describes under the appellation of the Quagga, notices that, in the former, the loins and lower part of the back are spotted. It is, he observes, the Opeagh, of Masson's Travels, in the Philosophical Transactions; and the Quagga, of the Hot-tentots.

He describes it as a Horse, striped like the Zebra, on the head, neck, and mane; the stripes, from the withers to the middle of the flanks, growing gradually shorter, and leaving part of the back, loins, and sides, quite plain. The ground colour of the whole upper part, and sides, is bay; and the belly, legs, and thighs,

thighs, are white, and free from spots or stripes. The ears, he remarks, are shorter than those of the Zebra.

"This animal, and the Zebra," says Pennant, "have been confounded together, and considered as Male and Female; but, in each species, the sexes agree in colour and marks; unless that those in the Male are more vivid. Sir Joseph Banks," he adds, "enabled me first to separate them, by the remarks he communicated to me on a Quagga he saw at the Cape in 1771. They keep in vast herds, like the Zebra, but usually in different tracts of country, and never mix together. They are of a thicker and stronger make; and, from the few trials which have been made, prove of a more docile nature. A Quagga caught young has been known to lose it's savage disposition, and run to receive the caresses of mankind; and there have been instances of it's being broke so far as to draw in a team with the common Horse. It is said to be fearless of the Hyæna, and even to attack and pursue that fierce animal; so that, according to Sparman, it proved an excellent guard to the Horses with which

which it was turned out to grass at night. Nature seems to have designed them for the beast of draft, or of burden, for this country; and they certainly might be broke for the carriage or the saddle. They are used to the food which the harsh dry pastures of Africa produce; are in no terror of wild beasts; nor are subject to the epidemic distemper which destroys so many Horses of the European offspring: and it may generally be observed, that both the Oxen and Horses, introduced into this country, lose the strength and powers of those in Europe.”

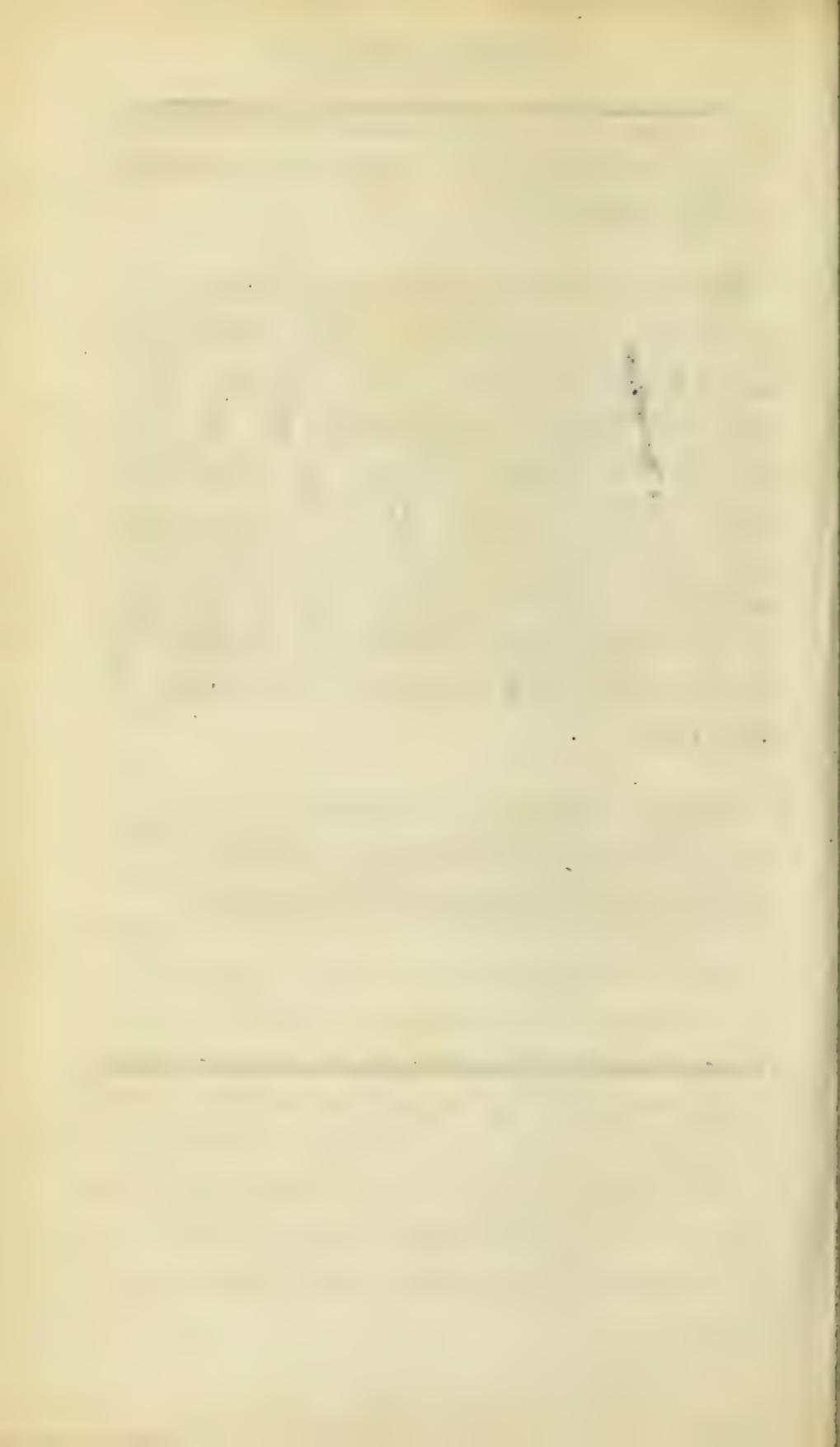
Such is the account which Pennant gives us of the Quagga: and to this we may add, that Edwards, in the description of his Male Zebra, observes that “our old natural historians have all mentioned this animal, and some of them describe a Striped Horse: but,” says he, “I am firmly persuaded, that the Striped Horse, and the Zebra, collected by Aldrovand and Gesner, and copied by a numerous tribe of their successors, are nothing but the Zebra; many of the old voyagers having called it a Horse, from its size; and others a Wild Ass,

from

from a resemblance of it's ears, mane, and tail, to that creature."

On these different opinions our readers may make their own comments. We confess ourselves unable to decide, with certainty, whether our figure from Edwards be, in fact, merely the Female Zebra; or whether it ought to be considered as a Female Quagga, and not a Zebra: nor are we by any means satisfied, in our own minds, that the Quagga is any thing more, admitting the animal here represented to be a Quagga, than a variety of the Zebra.

Neither Linnæus, nor Buffon, appear to have been aware of these distinctions; or, in truth, at all acquainted with the Quagga.







ROUND CRESTED DUCK.

ROUND-CRESTED DUCK.

THE Round-Crested Duck, we apprehend, is the name by which this bird was called in America, from whence Edwards received the subject he has so finely figured, and which we have copied. It is the *Mergus Cucullatus*, of Linnæus and Gmelin; the *Merganser Virginianus Cristatus*, of Brisson; the *Serrator Cucullatus*, of Klein; the Wind-Bird, of Willughby; the Hooded Merganser, of Pennant and Latham; the Crowned Merganser, of Buffon; and the Round-Crested Duck, of Catesby and Edwards.

Of this bird Edwards gives a very minute description, which we shall entirely transcribe.

“ The wing of the Round-Crested Duck, when closed, measures seven inches and a half. It appears to be rather larger than a Teal. It has a narrow black bill, being as deep as broad. The upper mandible is finely toothed on it’s edges, and the lower mandible has

ROUND-CRESTED DUCK.

has rows of small indented holes to receive the teeth of the upper mandible. Catesby says, it has yellow eyes. On its head, it has a towering crest of long white feathers, tipped with black: they do not spread in a globular form; but rather flattish, like a fan. From the crown of the head, above the eyes, spring long black feathers, which partly cover the white bottoms of the crest-feathers. From the eyes, backward, the hinder part of the head is white. The rest of the head, with the whole neck, back, and rump, are a deep velvet black. The tail is composed of eighteen feathers, the middlemost longer by an inch than the outermost; they gradually shorten from the middle to the sides. The tail-feathers, and greater quills, are of a dusky black on their upper sides, and a dark ash-colour beneath. The inner coverts of the wings are of a light ash-colour, with pretty deep white borders. The inner half of the quills, next the back, are of a glossy shining black; those nearest the back are long, sharp-pointed, and have white lines down the outer sides of their shafts: the middle quills are white on the edges of their outer webs. The first row of coverts

ROUND-CRESTED DUCK.

coverts are black, with deep white tips : the lesser coverts of the wings are of a light ash-colour, bordered round the ridge on the upper part of the wing with dusky. The breast, belly, and covert-feathers beneath the tail, are white. The black of the back breaks into the white in angles at the lower part of the neck. The sides of the belly, and the sides under the wing, are of an orange-coloured brown, marked with fine dusky transverse lines. The legs and feet are, like those of Ducks, of a dusky colour. The inner toes have small lateral webs on their outsides : the back toes have webs on their bottoms.

“ The Round-Crested Duck is from Pennsylvania. I received it, with other birds, from my obliging friend Mr. William Bartram, of that colony. In his letter of December 1759, accompanying these birds, he informs me, that they are all Birds of Passage : that they arrive in Pennsylvania, in November, from the north ; and continue till March, when they return again. Mr. Bartram says, that many animals, which abounded formerly in the settled parts, are now no more to be found,

ROUND-CRESTED DUCK.

found, but retire to the unsettled borders of the province ; and that some birds, never known to the early settlers, now appear in great numbers, and much annoy their corn-fields and plantations. Catesby has figured this Duck of it's natural size, in his History of Carolina. He rightly observes, that it is not strictly of the Duck kind ; but of the Mergus, described by Willughby. See various specimens of them, from p. 335. to 337. in his Vol. I. Catesby says, that they frequent fresh waters, more especially mill-ponds, in Virginia and Carolina ; and that the Females are all over of a brown colour, having a smaller tuft of feathers on their heads than the Males. Catesby, not being a settled inhabitant in America, had not observed that they were Birds of Passage."

Buffon's description is short. " This Merganser," says he, " which is found in Virginia, is very remarkable for a fine edged crown on it's head, black in the circumference, and white in the middle, formed of feathers elevated to a disk ; which has a fine effect, but appears to advantage only in the living bird.

It's

ROUND-CRESTED DUCK.

It's breast and belly are white; the bill, the face, the neck, and the back, are black. The quills of the tail and wings are brown; the innermost in the wings being black, and marked with a white streak. This bird is nearly as large as a Duck. The Female is entirely brown, and it's crest is smaller than that of the Male. Fernandez has described both, under the Mexican name Ecatototl, with the epithet Wind-Bird, without mentioning the reason. These birds are found in Mexico, and Carolina, as well as in Virginia, and haunt the rivers and pools.

He gives, as the specific character of this bird, the *Mergus Cucullatus*, that "it's crest is ball-shaped, and white on both sides; it's body, brown above, and white below."

This ball-shape of the crest, however, we find, in the accurate Edwards, is not precisely the fact.





NARCISSUS JACOBÆ.

Engraved by W. H. Worrell, Boston.

NARCISSUS JACOBEA.

WE are indebted to Edwards for the figure of this beautiful species of the *Narcissus*. It seems to have been greatly overlooked by botanical writers, few of whom appear at all acquainted with it. Miller, who enumerated many species, does not mention it even by name; though it had, previously to the publication of Edwards, in 1748, been figured by his then “late good friend, Dr. Dillenius, Professer of Botany in the University of Oxford. Sec,” says Edwards, “his *Hortus Elthamensis*, p. 196.”

The description of Edwards is very brief—“As the print,” says he, “expresses the shape of the flower beyond description, I shall be silent in that point. This is about the size of nature—[We have reduced it at least one third]—but some flowers are something larger, and their stalks longer. The six leaves of the flower are, within and without side, all of a most fine deep red or sanguine colour: the bottom\$

NARCISSUS JACOBEA.

bottoms of the leaves are green, gradually softening into the red. From the inside of the flower springs a stem, which parts at top into a triple head: round this are six lesser stamens, with small yellow oblong parts sticking to their points, the stamens are all red. Before the flower blows, it is inclosed in a dirty red sheath; which hangs below it, and withers when the flower blows. The green leaves of the plant grow much in the manner expressed by the figure. I drew this flower from nature, in the garden of my friend Mr. John Warner, Merchant, at Rotherhithe."



ARCTIC FOX.

In the last year, largely taken from the C. M. S. Missions

ARCTIC FOX.

THE Arctic Fox is the *Canis Vulpe's Lagopus*, of Linnæus; the *Vulpes Alba*, of Johnston; the *Canis Hieme Alba, Æstate ex Cineo Cœrulescens*, of Brisson and Schreber; and the *Isatis*, or *Arctic Dog*, of Gmelin, Buffon, and the Leverian Museum.

Pennant, who has figured this animal, describes it as having “ a sharp nose; short rounded ears, almost hid in the fur; long and soft hair, somewhat woolly, and of a white colour; sometimes pale cinereous; short legs; toes covered with fur on all parts, like those of a Hare; tail shorter than that of a Common Fox, and more bushy; and hair much longer in winter than in summer, as is usual with the animals of cold climates. It inhabits the countries bordering on the Frozen Seas, as far as the land is destitute of woods, which is generally from seventy to sixty-eight degrees latitude. The species extends to Kamtschatka, and in Bering's and Copper Islands; but in none of the other islands between Kamtschatka and the opposite parts of America,

discovered

discovered in Capt. Bering's expedition, in 1741. Is again found in Greenland, Iceland, Spitzbergen, Nova Zembla, and Lapland. It burrows under ground; forms holes many feet in length; and strews the bottom with moss. In Greenland, and Spitzbergen, it lives in the clefts of rocks; not being able to burrow, by reason of the frost. Two or three pair inhabit the same hole. They are in heat about Lady-day; and, during that time, continue in the open air, but afterwards take to their holes. They go with young nine weeks, continue united in copulation, and bark like Dogs; for which reasons, the Russians call them Peszti, or Dogs. They have all the cunning of the Common Fox: and prey on the young of Geese, Ducks, and other water-fowl, before they can fly; and on the Grouse, and Hares, of the country. They eat the eggs of birds; and, in Greenland, through necessity, feed on berries, shell-fish, or any thing the sea flings up: but their principal food, in the North of Asia, and in Lapland, is the Leming. Those of the country last mentioned are very migratory; pursuing the Leming, a very wandering animal. Sometimes

these

these Foxes will desert the country for three or four years ; probably, in pursuit of their prey : for it is well known, that the migrations of the Leming are very inconstant ; appearing, in certain countries, only once in several years. The people of Jenesea suspect, that they go to the banks of the Oby. The Arctic Foxes are taken in traps : oft-times, the Glutton, and Great Owl, destroy them before the hunter can take them out. The skins are of small value. The great rendezvous of these animals is on the banks of the Frozen Sea, and the rivers that flow into it, being found there in great troops. Molina found this species in Chili."

Buffon gives a still more copious account of this animal—" If," says he, " a number of resemblances, joined to a perfect conformity of internal parts, were sufficient to constitute unity of species, the Wolf, the Fox, and the Dog, would form but one ; for the resemblances are more numerous than the differences, and the similarity of the internal parts is compleat. These three animals, however, not only constitute three distinct species ; but are

are so distant from each other, as to admit intermediate species. The Jackail is an intermediate species between the Dog and Wolf, and the Isatis is placed between the Fox and Dog. The Isatis has hitherto been regarded as a variety of the Fox. But the description given of it by Ginelin, demonstrates it to be a different species.

"The Isatis is common in all the northern regions bordering on the Frozen Sea, and is never found on this side of the sixty-ninth degree of latitude. In the figure of the body, and the length of the tail, he is perfectly similar to the Fox, but his head has a greater resemblance to that of the Dog. His hair is softer than that of the Common Fox; and his fur is sometimes white, and sometimes of a bluish ash-colour. The head is short in proportion to the body; it is broad near the neck, and is terminated by a sharp muzzle. The ears are almost round. He has five toes, and five claws, on the fore-feet, and only four on those behind. The penis of the male is scarcely so thick as a goose-quill: the testicles which are as large as almonds, are so concealed by

the

the hair that it is difficult to perceive them. The hair over the whole body is about two inches long; it is smooth, bushy, and soft as wool. The nostrils and under lip are naked, and the skin of these parts is black.

“ In both male and female, the stomach, viscera, intestines, and spermatic vessels, are similar to those of the Dog: there is even a bone in the penis of the male, and the whole skeleton resembles that of a Fox.

“ The voice of the Isatis partakes of the barking of a Dog and the yelping of a Fox. The merchants who deal in furs distinguish two kinds of Isatis; the one white, and the other of a bluish ash-colour. The latter are most esteemed, and their price advances in proportion to their blueness or brownness. This difference of colour is not sufficient to constitute a difference of species; for M. Gmelin was assured, by the most experienced hunters, that in the same litter some of the young are white and others ash-coloured.

“ The Isatis is an animal peculiar to the
northern

northern regions. He prefers the coasts of the Frozen Sea, and the banks of the rivers which fall into it. He loves open countries, and never frequents the woods. He is found in the coldest and most naked mountains of Norway, Lapland, Siberia, and Iceland. These animals copulate in the month of March; and, their organs of generation being formed like those of the Dog, they cannot separate for some time. Their rutting season lasts fifteen days, or three weeks, during which they are always in the open air; and afterwards they retire to their holes, which are narrow, very deep, and have several entries. They keep their holes clean, and make beds of moss in them. The time of gestation, like that of the Bitch, is about nine weeks. The females bring forth about the end of May, or beginning of June, and generally produce six, seven, or eight, at a litter. M. Gmelin says, from the testimony of hunters, that these animals sometimes produce twenty or twenty-five at one litter. But this fact is extremely suspicious. Those which are to be white, are yellowish at the birth: those which are to be of a bluish ash-colour, are blackish: their hair, too, is then

then very short. The mother suckles and attends them in the hole during five or six weeks; after which, she makes them go out, and brings them victuals. In the month of September, their hair is more than half an inch long. At this period, those which are to be white, are almost entirely so; except a broad band along the back, and another across the shoulders. It is then that the Isatis is called the Cross Fox. From this circumstance, it is probable that the *Vulpes Crucigera* of Gesner, and of Rzaczinski, is the same animal with the Isatis. But this brown cross disappears before winter, when they are entirely white, and their hair is more than two inches in length. About the month of May, the hair begins to fall off, and the moulting is finished in July. Hence the fur is good in winter only.

“ The Isatis lives on Rats, Hares, and Birds; and, in seizing them, he uses as much address as the Fox. He swims across lakes, in quest of the nests of Ducks and of Geese, and eats the eggs and the young. In these cold and

and desert regions, he has no enemy but the Glutton, who lies in ambush for him.

"As the Wolf, the Fox, the Glutton, and the other animals which inhabit the northern regions of Europe, and Asia, have passed from one continent to the other, and are found in America, the Isatis ought likewise to be found there; and I presume, that the Silver-Grey Fox of North America, of which Catesby has given a figure, is the Isatis, and not a simple variety of the Fox."

In the Supplement to this article, Buffon has confounded the Corsak Fox, or *Canis Corsac* of the Linnæan system, with his *Isatis*, or Arctic Fox. He has even engraved a figure of the former, under the appellation of the latter.

This error was occasioned by a drawing transmitted from London to Buffon, by Mr. Collinson, in 1768, accompanied by the following account—"My friend, Mr. Paul Demidoff, a Russian," says Mr. Collinson, "who is an admirer of your works, sends you

you a drawing of an undescribed animal, called Cossac. It was brought from the vast deserts of Tartary, situated between the Rivers Jaick, Emba, and the source of the Irtish. These Cossacs are so numerous in that part of the country, that the Tartars transport annually fifty thousand of their skins to Oremburg, from whence they are carried to Siberia and Turkey. From the point of the muzzle to the origin of the tail, this animal is about one foot and eight inches in length; and his tail is ten inches long. The shape of the head, the mild aspect, and the barking, of this animal, make him approach the Fox. His blood is ardent; and his breath has a disagreeable odour, like that of the Jackall and Wolf.” After giving this extract from Mr. Collinson’s letter, Buffon remarks that, “from the drawing, and still more from the short descriptions of M. Demidoff and M. Gmelin, this animal appears to be the Isatis; and, for that reason,” he concludes, “I have caused it to be engraved.”

To this we shall only add, what Buffon has himself suspected, that he was better warranted

ARCTIC FOX.

ranted in mistaking the descriptions, than the figures, of these two animals. In their general form, they certainly but little resemble each other.





CRESTED KINGFISHER.

— Whistling like a Kite, & then a sharp, thin,

CRESTED KINGFISHER.

EDWARDS, we believe, first figured and described this small beautiful Kingfisher. It appears to be the *Alcedo Cristata*, of Linnæus and Gmelin; the *Ispida Philippensis Cristata*, of Brisson; the *Ispida Rostro Lecteo*, of Klein; the *Vintsi*, of Buffon: and the Crested Kingfisher, of Edwards, Latham, and other naturalists.

We shall first extract the entire description by which Edwards accompanied our figure; and then add what Buffon has collected respecting this bird.

" I take it," says Edwards, " to be the Male; because another of them, that came with it, of the same size and shape, was coloured like it in every respect, except that the colours were fainter, which I suppose to be the female.

" The bill is straight, sharp-pointed, ridged both

CRESTED KINGFISHER.

both above and beneath, and of a blackish colour. From the nostrils under the eyes pass lines of an orange colour. From the lower mandible of the bill the throat is white, which whiteness passes partly round the neck, and forms a collar. The crown of the head is covered with long blue-green feathers, variegated with black lines. These feathers, being long and loose, form a crest; which, I suppose, the bird can raise or lower at pleasure. The feathers immediately above the eyes are blue. The hinder part of the neck, the back, rump, wings, and tail, are of an exceeding fine ultramarine blue, the rump something lighter than the other parts. The tips of the quills are dusky; the inner covert-feathers of the wings, orange-coloured. The quills within are dusky, with their edges of a faint orange-colour. The under side of the tail is dusky, or blackish. The breast, belly, thighs, and covert-feathers under the tail, are of a bright orange-colour. The legs and feet are made as in other Kingfishers, and of a red or scarlet colour.

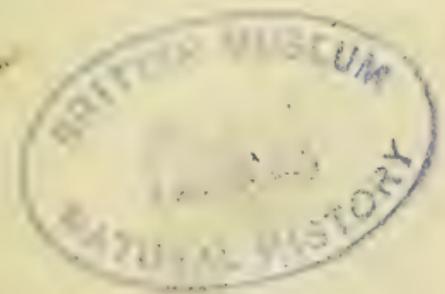
" The above described bird was shot in the
Island

Island of Johanna, to the northward of Madagascar, by Mr. Pegu, Merchant of London. It differs from our Kingfisher, in being smaller; in having no dark lines drawn under the eyes from the angles of the mouth; and in having no greenness in the wings. I do not find it described by any author."

Buffon, without mentioning the name of Edwards on the occasion, evidently describes this bird, under the name of Vintsi; "which," says he, "is the name given by the inhabitants of the Philippines to this small Kingfisher: those of Amboyna," he adds, "according to Seba, term it the Tahorkey, and Hito. The upper surface of the wings, and the tail, are sky-blue; the head is thick covered with long narrow feathers, neatly dotted with black and greenish points, that rise to a crest; the throat is white; on the side of the neck, there is a tawny rufous spot; and all the under surface of the body is dyed with this last colour. The whole bird is hardly five inches long."

Brisson's seventeenth species, Buffon remarks, if it be not entirely the same, appears nearly

nearly related to our Crested King-Fisher; as the slight difference between them seems not to indicate more than a variety. "We cannot," he adds, "ascertain to what species the small bird of the Philippines, which Camel calls Salaczac, and which appears to be a King-fisher, should be referred; nothing more than the name being given in the enumeration of the Philippine birds inserted in the Philosophical Transactions. Latham supposes it to be a variety of the Vintsi. It is the *Alcedo Cristata elegantissime picta*, of Seba; and the *Ispida Indica Cristata* of Brisson, which he describes from a drawing that was sent him from the East Indies: but, concludes Buffon, as we have not seen the bird, we can add nothing to his delineation."



BROAD-BORDERED WING-WINDMILL.



— Published Oct. 3, 1899 by Marvin, Worcester, Mass.

BROAD-BORDERED YELLOW UNDER-WING MOTH

HARRIS, who originally figured this handsome Moth, expressly says—" I have not seen it any where described." He informs us, that " it is called the Broad-Bordered Yellow Under-Wing; flies in August; and is very scarce."

This ingenious aurelian, who seems to have been unacquainted with the insect in it's Chrysalis and Caterpillar states, merely gives us a description of the Moth, as it is here represented of it's natural size, being two inches and a quarter in expansion.

Mr. Moses Harris divides his description, as usual, into two parts; the Upper Side, and the Under Side.

In his description of the Upper Side, he says—" The antennæ are like fine threads. The head and neck are light brown. The thorax is dark brown. The abdomen is of a deep

BROAD-BORDERED MOTH.

deep gold colour. The superior wings are of a warm yellow brown, clouded with shades of a deeper brown. A narrow angulated bar crosses the wings within a quarter of an inch of the fan-edge, of a light brown colour. The inferior wings are of an orange gold colour, having a broad border on the fan-edges nearly half an inch deep, and of a fine deep velvet black. The fringes are orange colour."

The Under Side is thus described—"The superior wings are black, surrounded by a broad border of light brown. The inferior wings are similar to their upper sides. The palpi, breast, legs, and abdomen, are cream coloured. It has a brown spiral tongue."



SEA OTTER.



Illustration by J. G. Keulemans
from 'The Natural History of the British Islands'

SEA OTTER.

MANY are the names under which this amphibious animal has been described by naturalists; and, as usual, the variety of appellations has given birth to great confusion. It is the *Mustela Lutris*, *Plantis Palmis Pilosis*, *Cauda Corpore quadruple breviore*, of Linnæus; the *Jiya*, called at Brasil the *Carigueibeju*, of Marcgrave; the *Lutra Brasiliensis*, of Ray; the *Lutra Nigricans*, *Cauda depressa et glabra*, of Barrère; the *Loutre*, or *Carigueibeju*, of Desmarchais; the *Lutra Marina*, of Kalm; the *Lutra Atri Coloris*, *Macula sub Guttura Flava*, of Brisson; the *Saricovienne*, of Thevet; the *Saricovienne*, or *Sea Otter*, of Buffon; and the *Sea Otter*, of Muller, Pennant, and most other naturalists.

The account of this animal, is thus given by Buffon—

“ ‘ The Saricovienne’—or Sea Otter—says Thevet, ‘ is found along the River Plata. It is of an amphibious nature, living more in the water than on land. This animal is as large as a Cat; and its skin, which is a mixture

mixture of grey and black, is as fine as velvet. The feet resemble those of water-fowl; and it's flesh is extremely good and delicate.' I begin," says Buffon, "with the above passage, because the animal is unknown to the naturalists under this name: and because they know not, that the Carigueibeju of Brasil, which is the same animal, has membranes between the toes. Marcgrave, indeed, who gives a description of it, mentions not this character; which is an essential one, since it brings this species as near as possible to that of the Otter. Besides, I believe that the animal mentioned by Gumilla, under the name of Guachi, may be the same with the Saricovienne; which is a species of Otter common throughout all South America. From the description of it given by Marcgrave and Desmarchais, it appears that this amphibious animal is as large as a middle-sized Dog; that the top of it's head is round, like that of the Cat; that it's muzzle is somewhat long, like that of the Dog: that it has the teeth and whiskers of a Cat; small, round, black eyes; ears roundish, and placed low; and five toes on each foot, with the thumb shorter than the other

other toes, which are all armed with sharp brown claws. The tail is as long as the hind legs. The hair is pretty short, and very soft. It is black on the body, and brown on the head, with a white spot under the chin. Its cry is nearly like that of a young Dog : and it is sometimes intermixed by another cry, similar to that of the Sagoin, or Fox-Tailed Monkey. It feeds on Crabs and other fish ; but it may likewise be nourished with the flour of Manioc, diluted in water. Its skin makes a good fur ; and, though it lives chiefly on fish, its flesh is very good, wholesome, and has no bad flavour.”

This, with the following note from Gumilla’s Hist. del Orenoque, and the succeeding remark, is all that Buffon has mentioned in his description of the Saricovienne or Sea Otter. “ ‘ On the rivers which fall into the Oronoko,’ says Gumilla, ‘ there are a great many Water Dogs, which the Indians call Guachi. This animal swims swiftly; and feeds on fishes. It is amphibious ; but goes, likewise, in quest of food, on the land. It digs ditches on the banks, where the female brings forth

forth her young. These ditches are not made in retired places; but where the animals live in common, and come to amuse themselves. I carefully examined their habitations, and found them to be always exceedingly clean. They leave not the smallest herb in the neighbourhood. They heap up, at a distance, the fragments of the fishes they eat; and, by leaping, going, and returning, they make their roads extremely neat and commodious.' Nota—These characters correspond with the Saricovienne; but the name Guachi seems to be here improperly applied; because it probably belongs to a species of Moufette, which we have called the Coase."

On referring to Buffon's account of his Coase, we find nothing to warrant this last observation, which we are entirely at a loss to account for. Indeed, we are unable to conceive, by what mode of reasoning Buffon has persuaded himself, that the Guachi, an inhabitant of "the rivers which fall into the Oronoko," is the true Sea Otter.

Pennant is of opinion, that the Saricovienne
of

SEA OTTER.

of Buffon is quite a different animal from the Sea Otter; being, as he thinks, "the very same with la Petite Loutre d'Eau Douce de Cayenne, described and figured by M. De Buffon, probably from a young animal."

Unquestionably, there is, in Pennant's description of the Sea Otter, much more of certainty than in the account given by Buffon, who, though he says no more than we have seen, under the article which professes to treat of this animal, has nevertheless told us, in the Supplement to his Description of the Common Otter, "that there are three species of Otters in Cayenne: the black, which weighs forty or fifty pounds; the yellowish, which weighs twenty or twenty-five pounds; and the small greyish kind, which weighs not above three or four pounds." He adds, that "the Small Fresh-Water Otter of Cayenne," evidently that which is referred to by Pennant, "is the third species of those above mentioned." To us it appears, that the Sea Otter is probably the first.

The account given by Pennant, whose excellent figure we have adopted, is as follows—

"The

SEA OTTER.

"The Sea Otter has a black nose; and the upper jaw is larger and broader than the lower. It has long white whiskers; the irides are hazel; and the ears are small, erect, and conic. In the upper jaw are six cutting teeth; in the lower, four. The grinders are broad, adapted for breaking and comminuting crustaceous animals and shell-fish. The skin is thick: the hair, which is thick and long, is excessively black and glossy; and, beneath it, there is a soft down. The colour sometimes varies to silvery. The legs are thick and short: the toes are covered with hair, and joined by a web. The hind feet are exactly like those of a Seal, and have a membrane skirting the outside of the exterior, like that of a Goose. The length, from nose to tail, is usually about three feet; but there have been instances of some being a foot longer. The tail, which is thirteen inches and a half long, is flat, fullest of hair in the middle, and sharp-pointed. The biggest of these animals weigh seventy or eighty pounds. They inhabit, in vast abundance, Bering's Island, Kamtschatka, the Aleutian and the Fox Islands between Asia and America,

rica, and the interior sea, as far as has been discovered, to the east of De Fuca's Straits. They are sometimes seen in troops of hundreds, and a hundred leagues from land. They are entirely confined between Latitudes 49 and 60 North, and between East Longitude, from London, 126 to 150. During winter, they are brought in great numbers, by the eastern winds, from the American to the Kurilian Islands. They are most harmless animals : and so affectionate to their young, that they will pine to death at the loss of them, and die on the very spot where they have been taken from them. Before the young can swim, they carry them in their paws, lying in the water on their backs. They run very swiftly. Swim, often, on their backs, their sides, and even in a perpendicular posture. They are very sportive ; embrace each other, and even kiss. They inhabit the shallows, or such places as abound with sea-weeds. They feed on Lobsters, fish, Sepiæ, and shell fish. They bring but one young at a time ; suckle it a year ; and bring it on shore. They are dull-sighted, but quick-scented : and are hunted for their skins, which

are

are of great value, being sold to the Chinese for seventy or a hundred rubles apiece. Each skin weighs three pounds and a half. The young are reckoned very delicate meat, scarcely to be distinguished from a sucking Lamb."





TURKEY PHEASANT.

TURKEY PHEASANT.

THIS rare and very curious production of nature, which was originally figured and described by Edwards, under the name of the Turkey Pheasant, is the *Meleagris Hybrida* of Linnæus.

"The size of this bird," Edwards informs us, "seemed to be between a Cock Pheasant and a Hen Turkey. Some of the principal measures," he says, "are as follows—From bill-point to tail-end, stretched twenty-eight inches; from the bill to the end of the toes, twenty-five inches and a half; the tips of the wings when extended, thirty-two inches distant; the wing when closed, ten inches; the leg, from the knee to the heel, three inches and a quarter; and the middle-toe, and claw, two inches and three-quarters.

"The bill is black, with a little flesh colour: At the basis of the lower mandible, above the nostrils, are longish black feathers, that make
a little

a little tuft. The eyes were hazel-coloured; surrounded with a plait of skin of a red colour, thinly sprinkled with small hairs. The remainder of the head, and that part of the neck which is void of feathers in Turkeys, were covered with very short brown feathers; with dusky transverse lines, lighter on the throat than behind. The lower part of the neck was covered with longer feathers, black with a purplish or copper gloss, like those of black Turkeys. The whole belly and sides were covered with dusky black feathers. About the vent, there is a white spot. The coverts beneath the tail are orange-coloured, with transverse lines of black. The back, upper sides of the tail, and wings, are of a brown colour, variegated with greater and smaller transverse lines of black, as the figure will best express. The thighs are coloured and marked like the wings. The inner coverts of the wings are whitish: the quills beneath are ash-coloured, transversely mixed with white. The tips of the wings, and of the tail, are dusky. The tail has sixteen feathers. The legs, feet, and claws, are of a dark ash-colour. The two outer toes on each foot are connected

TURKEY PHEASANT.

to the middle ones by membranes. The feathers were all double; one firm, the other a little distinct downy feather, springing both from the same stem.

"I was favoured," concludes Edwards, "with this uncommon production, by the curious and worthy Henry Seymer, Esq. of Hanford, Dorset; to whom I am greatly obliged on many other accounts. There were three or four of them discovered in the woods near his house, and he had the luck to shoot one of them in October 1759; which bird is on my table while I write this description. I have already given some account of it to the Royal Society, laying the bird and drawing before them at the same time; who have been pleased to order it's figure and description to be published in the Philosophical Transactions for the year 1760."

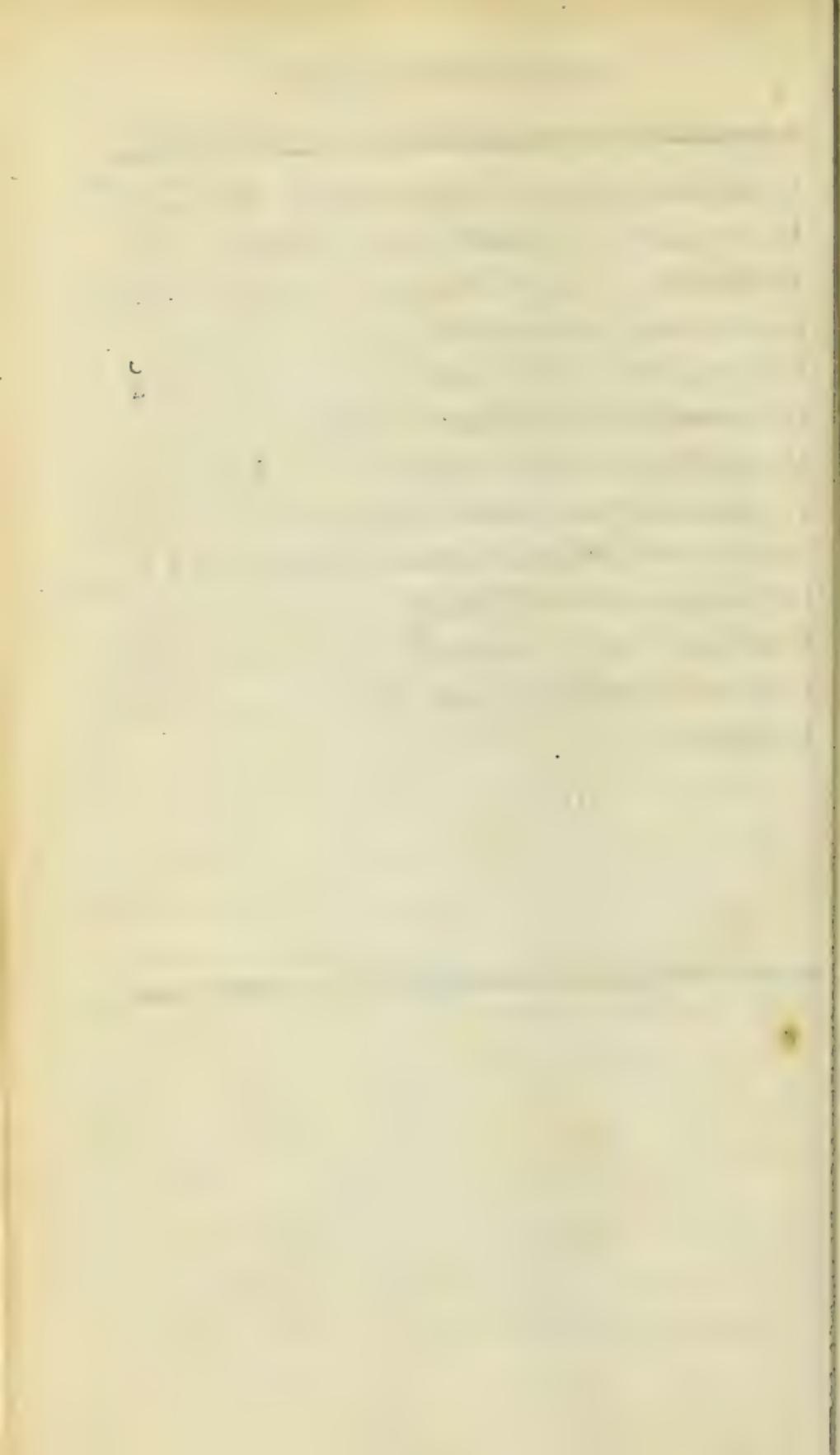
Buffon, in his account of the Turkey, thus notices this Turkey Pheasant—"Edwards," says he, "mentions another hybrid produced between the Turkey and the Pheasant. The individual which he describes, was shot in the woods

woods near Hanford in Dorsetshire; where it was seen in the month of October 1759, with two or three other birds of the same kind." It was of a middle size between the Pheasant and the Turkey, its wings extending thirty-two inches. A small tuft of pretty long black feathers rose on the base of the upper mandible. The head was not bare, like that of the Turkey, but covered with little short feathers: the eyes were surrounded with a circle of red skin, but not so broad as in the Pheasant. It is not said, whether this bird could spread the large feathers of the tail into the wheel-shape: it only appears, from the figure, that it carried the tail in the same way as the Turkey generally does. It must also be observed, that their tail is composed of sixteen quills, as in the Grouse; while that of the Turkey, and of the Pheasant, consists of eighteen. Also, each feather on the body shot double from the same root; the one branch stiff and broad, the other small and covered with down: a character which belongs neither to the Pheasant nor the Turkey. If this bird was really a hybrid, it ought to have had, like other hybrids—1st, the character common

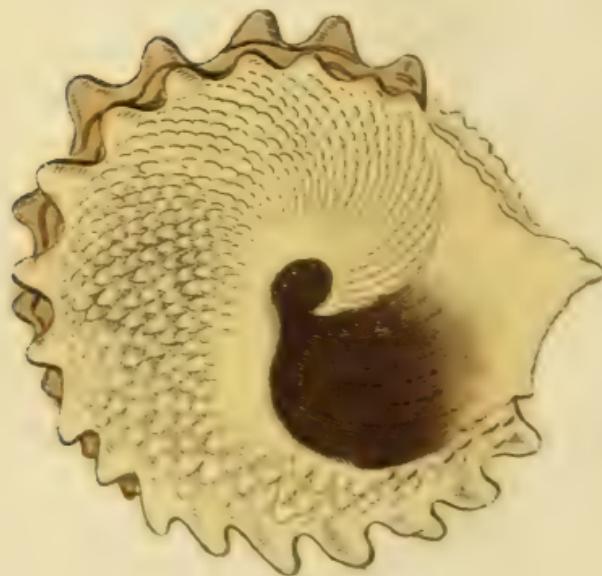
to

TURKEY PHEASANT.

to the two primitive species ; 2dly, the qualities intermediate between the extremes : a circumstance that, in this case, does not take place ; since this individual had a character not to be found in either—the double feathers—and wanted others, that occur in both—the eighteen quills of the tail. Indeed, if it be insisted, that it was hybridous, we should more reasonably infer, that it was produced by the union of the Turkey with the Grous ; which, as I have remarked, has no more than sixteen feathers in the tail, but has the double feathers.”







CHINESE PAGODA.

Illustrated by J. Sowerby. Harrison & sons. 1847. London.

CHINESE PAGODA.

THIS fine shell is a most finished production of nature. The contours, or whirls, have deep ridges, terminated by very broad borders, curiously disposed in regular raised plaits, or folds, and ending in a serrated or triangular edging. This peculiar conformation has given rise to the name, under which it is described by most naturalists, of the Chinese Pagoda, or the Temple of a Chinese Idol: and, certainly, as is remarked by Knorr, the appellation is admirably suited to it's appearance. The shell is thick; and it is of a brown colour, often approaching to red, intermixed with a sea-green line. It belongs to the class of those shells to which Rumphius has given the names of *Trochus Tertius*, *Trochus Quartus*, *Trochus Papuanus*, and *Trochus Longævus*. This animal is accustomed to attach itself to the rocks above the sea, and to nourish itself there with the saline humidity which it imbibes. When it falls into the water, it dies; but, if it be kept dry, it will exist more than a year without

without receiving the smallest degree of nourishment; and it owes to this circumstance, an appellation which it has obtained, as well from Rumphius, as from some other naturalists, of the Long-Lived Snail: in French, L'Escar-got à Longue Vie; in German, Langlebende Schnecke.

The bottom figure, on the annexed plate, represents the under side, or bottom, of this shell; and yields not to the upper, either in beauty or symmetry. This bottom is almost wholly composed of small shells placed one above the other, having an appearance not very unlike that of the Crocodile's scaly armour. The aperture, or mouth, is here sunk in a kind of umbilical hole, which seems to unite itself to the animal. This aperture is of a beautiful brown; which, in the cavity, becomes red.





THIBET MUSK.

Illustration by J. G. Keulemans, after Mr. G. M. Treacher.

THIBET MUSK.

BUFFON, who treats of this animal under the general name of the Musk, observes that it is “as famous as it is little known. It has,” says he, “been mentioned by all our modern naturalists, and by most travellers into Asia. Some of them have considered it as a Stag, a Roebuck, or a Musk Goat, and others as a large Chevrotain. It seems, indeed, to be an ambiguous animal, participating of the nature of all these species. We may be assured, however, that its species is distinct, and different from all other quadrupeds. It is of the size of a small Roebuck, but has no horns. By this character, it resembles the Memina or Indian Musk. It has two large tusks in the upper jaw, by which it approaches to the Guinea Musk. But what distinguishes the Musk from all other animals, is a kind of bag near its navel, about two or three inches in diameter, in which the liquor, or rather the fat humour, called Musk, is secreted; and which differs, both in odour and consistence, from that of

the

the Civet. Neither the Greeks nor Romans mention this animal. It was first taken notice of by the Arabians. Gesner, Aldrovandus, Kircher, and Boym, have treated pretty fully of this animal; but Grew is the only author who has given an exact description of it, from a stuffed skin which, in his time, was preserved in the cabinet of the Royal Society of London. The year after the publication of Grew's work, in 1681, Luc Schrockius printed, at Vienna, the history of this animal; which contains nothing remarkable, either for correctness or novelty. I shall, however, combine the facts which can be gathered from it with those of other authors, and particularly the more modern travellers. Having never been able to procure the animal itself, we are reduced to the necessity of collecting and digesting what has been said of it by others. From Grew's description, which is the only authentic work we are possessed of, it appears that this animal has long coarse hair, a sharp muzzle, and tusks like those of a Hog; and that, by these characters, it approaches the Wild Boar, or rather the Babiroussa, called the Wild Indian Boar by the naturalists; which, along with several characters

characters of the Hog, is like the Musk Animal, smaller, and has taller and more nimble limbs, resembling those of the Stag, or Roe-buck. On the other hand, the American Hog, which we have called Peccary, has on his back a cavity, or purse, containing an odiferous humour; and the Musk Animal has a similar purse, not on his back, but under his belly. In general, none of those animals which produce odorous fluids—as the Badger, the Beaver, the Peccary, the Musk Rats, and the Civet, belong to the genus of Deer, or Goats. Hence we should be led to think, that the Musk Animal makes a nearer approach to the Hog-kind, of which he has the tusks; if, at the same time, he had cutting teeth in the upper jaw. But his want of these teeth connects him with the ruminating animals; and, particularly, with the Chevrotain, which chews the cud, though it has no horns. All these external characters, however, furnish us with conjectures only; an examination of the internal parts can alone decide concerning the nature of this animal, which is still very little known. I have made it follow the Goats and Antelopes; not because it seems to have any connection with

with these species, but lest I should too much offend the prejudices of most naturalists.

Marco Paolo, Barbosa, and P. Philippe de Marini, are all more or less deceived in the notices they have given concerning this animal. The only fact in which they agree is, that the Musk is formed in a pouch, or tumour, near the navel; and it appears from their testimonies, as well as those of other travellers, that the Male alone produces the Musk; that the Female has the same pouch near the navel, but that the humour secreted in it has not the same odour; that this tumour of the Male is not filled with Musk, except in the rutting season; and that, at other times, the quantity of this humour is smaller, and its odour weaker. With regard to the Musk itself, its essence is, perhaps, as little known, as the nature of the animal from which it proceeded. All travellers agree, that this substance is perpetually adulterated with blood, or other drugs, by the venders. The Chinese not only augment its size, by mixture; but they endeavour to increase its weight, by incorporating with it finely powdered lead. The Musk that is purest,

purest, and in most request among the Chinese themselves, is that which drops spontaneously from the animal, on stones or trunks of trees; against which it rubs, when the matter is too abundant, or begins to irritate the pouch where it is formed: that found in the pouch itself is seldom so good, because it is not fully ripe; or, rather, because it is during the rutting season only that it acquires its greatest strength and odour; and, at this period, the animal endeavours to get rid of a matter which is too highly exalted, and occasions itching and some degree of pain. Both Chardin, and Tavernier, have well described the methods practised by the Orientals to adulterate Musk. The merchants must necessarily augment the quantity of it beyond conception: for, in one year, Tavernier purchased 1663 bags, which supposes an equal number of animals: but as this animal is no where domestic, and the species is confined to a few provinces of the East, it cannot possibly be so numerous as to produce such a quantity of this matter. Most of these pretended bags, therefore, must be little artificial bladders, made of the skin of other parts of the animal's body, and filled with

with blood and small portions of the true Musk. It affords, in fact, the strongest of all known odours. A small bit of it perfumes a large quantity of matter. The odour of a small particle extends through a considerable space. It is, likewise, so fixed, and permanent, that, at the end of several years, it seems to have lost no part of it's activity."

This is the entire description given by Buffon; which, however, he has accompanied by copious notes, from Grew, Kircher, Paolo, Chardin, Thevenot, Tavernier, &c.

This animal is the *Moschus Moschiferus* of Linnæus; the *Capreolus Moschi*, of Gesner; the Animal *Moschiferum*, of Ray; the Musk, or Musk Animal, of Grew, Tavernier, Du Halde, Brisson, and Buffon; and the Thibet Musk of Gmelin, and Pennant. "It is," says the latter, "of the form of a Roebuck. It's length is three feet three inches. The upper jaw is much longer than the lower: on each side is a slender tusk, nearly two inches long. In the lower jaw are eight small cutting teeth; and, in each jaw, six grinders. The ears are long and narrow; the insides of a pale yellow, and

and the outsides a deep brown. The chin is yellow. The hair on the whole body is erect, very long, and each is marked with short waves from top to bottom: the colour near the lower part is cinereous; near the end, black; and, at the tips, ferruginous. The fore parts of the neck, in some, is marked on each side with long white stripes from the head to the chest: the back is striped with pale brown, reaching to the sides. The hoofs are long, much divided, and black. The spurious hoofs of the fore feet are very long. The tail, which is an inch long, is hid in the hair. The scrotum is of a bright red colour. The female is less than the male; has a sharper nose; wants the two tusks; and has two small teats. These animals inhabit the kingdom of Thibet, the Province of Mohang Meng in China, Tonquin, and Bontan, as well as about the Lake Baikal, and near the Rivers Jene-sea and Argun. They are found from latitude 60, to 44 or 45: but never wander so far south, except when forced, through hunger, by great falls of snow; when they migrate, to feed on corn and new grown rice. They inhabit, naturally, the mountains that are covered with pines,

pines, and places the most wild and difficult of access; love solitude; and avoid mankind. The chace is a trade of great trouble and danger. If pursued, they seek the highest summits, inaccessible to men or dogs."

The Thibet Musk is a very gentle and excessively timid animal; except in the season of love, in November or December, when the Males fight violently with their tusks for the Females. It is exceedingly active in leaping, running, climbing, and swimming, and is with difficulty tamed. The flesh of the younger animals is reckoned delicate. The colour varies according to the age of the animal and time of the year; but is chiefly blackish brown on the upper, and hoary, yet seldom white, on the under parts of the body. In younger animals, the fur is marked with streaks and spots; which, growing larger, as the animal grows older, at last vanish altogether. The true Musk is a clotted, oily, friable matter, of a dark brown colour: that from Thibet is best; the Siberian Musk having somewhat the flavour of Castor. Each bag contains from a drachm and a half to two drachms.





SWALLOW-TAILED INDIAN ROLLER.

Illustration by J. G. Keulemans after W. H. Sykes.

SWALLOW - TAILED INDIAN ROLLER.

IF this bird be, in fact, “ the Coracias Sene-galensis of Gmelin, and the Senegal Roller of Latham ;” as is said, in a note to the translation of Buffon’s Natural History of Birds, added to his account of the Senegal Roller, which he considers as a variety of the Abyssinian Roller ; it must be acknowledged, that the name of Indian Roller, which we have adopted with the figure, from Edwards, is very improper. We apprehend, however, that there is of this but little certainty ; and, therefore, as Edwards called it the Swallow-Tailed Indian Roller, and Linnæus has himself recognized it as his *Coracias Caudata*, we have retained the original appellation. In another note, to Buffon’s Angola Roller, that bird is said to be the *Coracias Caudata* of Linnæus, and the Long-Tailed Roller of Latham.

That Edwards might be misinformed, and even Linnæus mistaken, is very possible ; and both must have happened, in this case, if the above

above notes to Buffon are well founded. But be this as it may, there can be no doubt as to the facts, mentioned in Edwards's description, which we shall wholly transcribe.

"The figure," says Edwards, "is reduced in size, to bring it into the compass of the plate. It seemed rather less than the Common Jay. The wing, when closed, measured over six inches. The outer feathers of the tail were about ten-inches long.

"The bill is pretty straight, but has something of an angle near the point: it is of a black colour; having a few black bristles, or hairs, round the basis of the upper mandible, which point forward. The feathers all round the basis of the bill are white for a small space. The head, fore part of the neck, and whole underside to the nethern covert-feathers of the tail, are of a blueish sea-green colour. The hinder part of the neck, the upper half of the back, and the inner or shorter quills next the back, are of a reddish brown colour, intermixed a little with green on the neck and back. The lower half of the back, and coverts on the upper

upper side of the tail, are of an ultramarine blue, with transverse lines of a darker blue. The tail, which to me seemed perfect, had only ten feathers; the two outermost longer than the others by five inches: the middle feathers of a darkish green; the side feathers of a light sea-green, except the long feathers, the tips of which were black so far as they exceeded the length of the other feathers. The wing, on the upper side, has the lesser covert-feathers of a fine blue; the coverts next above the quills of a blueish sea-green: the greater quills for the better half toward their bottoms, are of a fine blue, which gradually changes into a dusky colour toward their tips; the inner coverts of the wings are sea-green. The legs are short in proportion, and the toes divided to their bottoms, all covered with scales of a reddish flesh-colour.

“ Mr. Page, Gentleman to Lord Melcombe, obliged me with a sight of this curious bird; and informed me, that it was a native of the Island of Ceylon, in the East Indies. It differs very little from the Roller found in Europe; except in the excessive length of the outer

outer feathers of the tail. Brisson has given a figure and description of another Long-Tailed Roller, which agrees in shape with mine; but his description differs so much, that I think it cannot be specifically the same. He calls it, *Rollier d'Angola*. I believe," concludes Edwards, "this bird has not, till now, been figured or described."

It must be confessed, that what Edward says, relative to the Angola Roller of Brisson, seems favourable to the opinion advanced in Buffon. We shall, therefore, add the whole of his description, not only of the Senegal Roller, but of the Angola Roller likewise.

"The Abyssinian Roller, or *Coracias Abysinica* of Gmelin, is much like the European Roller in its plumage; only its colours are more lively and brilliant, which must be ascribed to the influence of a drier and hotter climate. On the other hand, it resembles the Angola Roller, by the length of the two side feathers of its tail, which project five inches beyond the rest. In short, this bird seems to occupy a place between the European and

and Angola Rollers. The point of its upper mandible is very hooked. It is entirely a new species."

The Senegal Roller, considered by Buffon as a variety of the Abyssinian Roller, he thus describes—

" We may consider the Senegal Roller as a variety of that of Abyssinia. The chief difference between them is, that in the Abyssinian bird the orange-colour of the back does not extend, as in that of Senegal, so far as the neck and the hind part of the head; a difference which would not be sufficient to constitute two distinct species: especially, as they belong to nearly the same climate; as the two lateral quills are double the length of the intermediate ones; as, in both, the wings are shorter than those of the European Roller; and, lastly, as they are alike in the shades, the lutsre, and the distribution of their colours."

As this is the entire description given by Buffon of these two birds; from which, however, it appears that the upper mandible is very hooked

hooked, while that of Edward's Swallow-Tailed Indian Roller is " pretty straight ;" we are by no means satisfied that the latter may not be a distinct bird : and, if so, why should it not be an inhabitant of Asia, as Edwards was told ?



CITRINE AND MOURNING BUTTERFLIES.



— *Published January 4, 1888, by Hermann, Son & Co., New York.*

CHINESE BROWN BUTTERFLY.

ALL we know of this handsome Fly, is the little which Edwards gives us to accompany the figure originally published by him. Even the great Linnæus, in his Catalogue of Latin Names to Edwards's Birds, &c. has entirely omitted this object.

What Edwards says, is merely descriptive, and is literally as follows—

“ The Brown Butterfly is from China. It’s upper side is of a dark dusky-brown. The upper wings have each a large black spot, or eye, containing two small white spots within them: these black spots are partly encompassed by orange-colour. The under wings have small black spots round their borders, with light and whitish dots in their middles. The under side of the Fly is dusky, inclining to a rose-colour, variegated with lighter and darker parts, and has some small dusky rings.”





DORMOUSE.

Published October 2006 by Mariana Books LLC, New York.

DORMOUSE.

THE Dormouse, or *Mus Avellanarius* of Linnæus, is commonly called, in many parts of England, the Sleeper. Buffon says, of this species, that “ they seem not to inhabit Britain :” a singular error, for which it is difficult to account; since, in fact, though not remarkably numerous, Dormice are by no means scarce in England. He gives us a better foundation to suspect, that they are rarely met with in France; for he tells us, that “ there is a considerable difficulty in procuring specimens of them.” The Fat Squirrel; and the Garden Squirrel, often called the Greater Dormouse, or Sleeper; both of which are large species of Dormice; appear to be more particularly the Dormice of the temperate climates of Europe, as our small Common Dormouse is most commonly found in countries farther north, but not too far. The first of these three species, Buffon calls the Loir; the second, the Lerot; and the last, which is our Common Dormouse, the Muscardin.

The

The Dormouse represented in our print of the size of life, was originally figured by Edwards; who believes it to have been a young one, not grown to its full size, though but little short of it. The animal, he observes, is of a reddish brown, or Fox-colour, on its upper side and tail, and white on the throat and belly. "It is," says Edwards, "toothed like a Squirrel, of which genus I take it to be a species. It is common in England; and is found in woods and hedge-rows where Nuts abound, on which it principally feeds. It sleeps for several months in the winter. They are kept tame with us, by many people, in little hutches, with wire cages adjoining to them. When they are asleep, they have no visible motion of breathing, pulsation, or sensible warmth."

This animal, which may be considered, generally, as an inhabitant of Europe, is the *Mus Avellanarum Minor*, or Lesser Filbert Mouse, of Ray, Johnston, and Aldrovandus; and the *Myocus Muscardinus*, of Gmelin.

It is the size of a Common Mouse, but plumper;

plumper; and has round naked ears; full black eyes; and a tail two inches and a half long, surrounded with short hairs, and bushy at the end. The general colour is a tawny red, the throat being white. Like the Squirrel, it sits up on it's hind legs when eating; uses it's fore paws to carry it's food; and conceals what it cannot use.

Goldsmith thus describes these animals—
“They inhabit,” says he, “the woods or very thick hedges, forming their nests in the hollow of some tree, or near the bottom of a close shrub; humbly content with continuing at the bottom, and never aspiring to sport among the branches. Towards the approach of the cold season, they form a little magazine of nuts, beans, or acorns; and, having laid in their hoard, shut themselves up with it for the winter. As soon as they feel the first advances of the cold, they prepare to lessen it's effect, by rolling themselves up in a ball, and thus exposing the smallest surface to the weather. But it often happens, that the warmth of a sunny day, or an accidental change from cold to heat, thaws their nearly stagnant fluids, and they revive.”

On

On such occasions, they have their provisions laid in, and they have not far to seek for their support. In this manner they continue, usually asleep, but sometimes waking, for about five months in the year; seldom venturing from their retreats, and consequently but rarely seen. Their nests are lined with moss, grass, and dead leaves. They usually bring three or four young at a time; and that but once a year, in the spring."

Buffon says, that "when they grow large, they abandon their nests, and harbour in the hollows or under the trunks of old trees."





FRANCOLIN.

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FRANCOLIN.

THIS fine bird is the *Tetrao Francolinus*, of Linnæus ; the *Perdix Francolinus*, or *Franco-lin Partridge*, of Latham ; the *Tetrao Orientalis*, of Hasselquist ; and the *Francolin*, of Edwards, Buffon, and most other naturalists.

Our beautiful figure is from Edwards, by whom this Francolin is thus described—

“ It was something larger than our Common Partridge. Some of it’s measures were as follows : the wing, when closed, was six inches long ; the lower leg, from the knee to the bottom of the heel, or foot, was two inches and a quarter ; from the point of the bill, to the angles of the mouth, was a very little over an inch.

“ The bill,” continues Edwards, “ is of a black colour, shaped much like a Hen’s bill. The nostrils are placed in a little rising. The tongue, and inside of the mouth, are of a flesh-colour.

colour. The irides of the eyes are of a hazel colour. The head is covered with black feathers; except a white spot under each eye, a little mixture of red on the crown, and some small spots of white which proceed from above the eyes, and join on the hinder part of the head. The feathers all round the neck are of a reddish orange colour. Below this collar, the feathers are black all round the neck; and spotted with small round spots behind, between the neck and back. The belly is black, and so is the breast, spotted on the sides with very regular round white spots: there are, also, on the belly and thighs, white spots; but they are more broken, and mixed with a little reddish colour. The covert-feathers under the tail are wholly orange colour. The back is covered with feathers black in their middles, and bordered with a reddish brown: those on the sides of the back, which fall partly over the wings, have the black and brown indented into each other. The wings, both quills and covert-feathers, are dusky, and regularly marked with round light brownish spots. The insides of the wings are coloured as they are without; but the spots are more broken, and running

ning in transverse lines. The tail-feathers are marked in the same manner, except at their tips, which for an inch broad were wholly black. The legs and feet were covered with red scales, in colour like Pigeons' feet; the three fore toes were connected near their bottoms by membranes; and the claws were of a horn-colour. I believe it to be a cock bird, by reason it had spurs.

“ This bird,” concludes Edwards, “ was brought alive to England, from the Island of Cyprus, in the Mediterranean Sea; and presented to Mr. James Leman, who lent it to me, to make a drawing of it: but not till it was dead; though while it was fresh, its eyes and feet retaining their living colour. Mr. Willughby, in his Ornithology, has given a description of the Francolin: but his seems a quite different bird from this of mine; which I take to be, truly and properly, what is understood to be the Francolin by the Italians. Olina, in his book of the Nature of Birds, Rome 1622, has given a figure of the Francolin; but it is a bird altogether different from what I have here presented. Tournefort, in his

his Voyage to the Levant, has placed, against his Description of Birds in the Isle of Samos, a print of this very bird I have figured; which he calls, on the plate—"A Francolin; a sort of Fowl frequenting the Marshes."—Though he has not mentioned any thing of a Francolin in his text, but speaks of Heath-cocks, which they call Meadow Partridges; yet, I suppose, the bird he has figured must be understood to be one of these. This Francolin of mine is also a native of Bengal, in the East Indies; for it is very exactly figured in a parcel of drawings after nature, done in that country, at the request of the late Dr. Mead, and sent to him in London about twenty years before his death, by a friend of the Doctor in India. Tournefort's print is the only figure published of this bird that I know of; but that has no description with it: so that this of mine may be accounted the first History of the Francolin."

Buffon observes, that the name Francolin has been bestowed on very different birds. "We have," says he, "already seen it applied to the Attagen; and, from a passage of Gesner,

Gesner, the bird known at Venice by the name of Francolin, appears to be a kind of Hazel Grous. The Neapolitan Francolin is larger than a Common Hen; and, indeed, the length of it's legs, bill, and neck, will not allow us to regard it as either a Hazel Grous, or a Francolin. All that we know of the Francolin of Ferrara is, that it has red feet, and lives on fish. The bird of Spitzbergen, which has been called Francolin, receives also the appellation of the Beach Runner; because it never strays far from the shore, where it picks up Grey Worms, and Shrimps, for it's subsistence: it is no larger than a Lark. The Francolin which Olina figures and describes, is the one of which I am to treat. That of Edwards differs from it in some respects; and appears to be exactly the same bird with the Francolin of Tournefort, which also resembles that of Ferrara, since it is found on the sea-coast, and in marshy situations. Our's seems to differ from these three last, and even from that of Brisson: not only in the colour of it's plumage, and even of it's bill, but by the size and form of it's tail; which is longer, in Brisson's figure, more spread in our's,

our's, and hanging in those of Edwards and Olina. But, notwithstanding this, I believe that the Francolin of Olina, that of Tournefort, that of Edwards, that of Brisson, and my own, are all of the same species: since they have many common properties; and their small differences are not sufficient to constitute different races, but may be referred to the age, the sex, the climate, and other local or accidental circumstances. The Francolin is, undoubtedly, in many respects, like the Partridges; and, for this reason, Olina, Linnæus, and Brisson, have ranged it with them. For my own part, I am convinced, from a close examination and comparison of these two birds, that they ought to be separated: for the Francolin differs from the Partridges, not only in the colour of it's plumage, it's general shape, the figure of it's tail, and it's cry; but is distinguished also by a spur on each leg, whereas the Male Partridge has only a callous tubercle. That of Olina had none; but it was, probably, a Female. The Francolin is also much less diffused than the Partridge: it can hardly subsist, except in the warm climates. Spain, Italy, and Sicily, are almost the only countries

countries of Europe where it is found: it inhabits, also, Rhodes; the Isle of Cyprus; Samos; Barbary; especially in the vicinity of Tunis; Egypt; the coasts of Asia; and Bengal. In all these places, both Francolins and Partridges occur; but they have each their appropriated name, and form distinct species. As these birds are very rare in Europe, and their flesh is excellent food, the killing them has been forbidden in many countries, under severe penalties: and hence, it is said, they derive the name Francolin; because they enjoy a sort of freedom, under the protection of these prohibitions.

“ Little more can be said of this bird, than what the figure suggests. Its plumage is very beautiful; it has a conspicuous collar, of an orange-colour. It is rather larger than the Common Partridge: the Female is smaller than the Male; the colours of her plumage fainter, and less variegated. These birds feed on grain, and they may be bred in aviaries; though care must be taken to give each a small separate crib, where it may squat and conceal itself, and to strew sand, and a little gravel,

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on the floor. Their cry is a kind of loud whistle, audible at a great distance. Francolins live much in the same manner as Partridges: their flesh is exquisite; and, sometimes, preferred to that of Partridges or Pheasants.

“ Linnæus takes the Damascus Partridge of Willughby for the Francolin. But we may observe, 1st. That this Damascus Partridge is rather Belon’s, who first took notice of it, and whom Willughby only copied: 2dly, This bird differs from the Francolin—both in the size, which is inferior to that of the Common Partridge, according to Belon; and in its plumage, as will easily be perceived by comparing the figures. Besides, its legs are feathered, which prevented Belon from classing it with the Plovers. Linnæus should also have admitted the Francolin of Tournefort, as the same with that of Olina which Willughby mentions. Lastly, the Swedish naturalist is mistaken, in fixing exclusively on the East as the climate of the Francolin; for, as I have already observed, it is found in Sicily, Italy, Spain, and Barbary; and in many other countries

countries to which the epithet of Oriental cannot be applied.

“ Aristotle,” concludes Buffon, “ ranges the Attagen, which Belon conceives to be the Francolin, among the pulverulent and granivorous birds. Belon makes him also say, that it lays a great number of eggs, though no mention of this sort is made in the place quoted; but it is the necessary consequence of Aristotle’s theory with regard to pulverulent granivorous birds. Belon relates, on the authority of the ancients, that the Francolin was common in the Plain of Marathon, being fond of marshy situations; which agrees very well with Tournefort’s observations respecting the Francolins at Samos.”

173
egli è stato istituito nell'abbiato di
Pavia e da ciò deduce che il sacerdotio
non può quindi trichismare il Dio dell'ordine
ma solo Dio supremo nella concezione della religione.

174
Invece non si riconosce nulla di tutto questo

perché

175
non si riconosce nulla di tutto questo





BLUE LIZARD.

Published January 1879 by Harrison Clark Rader; Test. exec'd.

BLUE LIZARD.

IN the Catalogue of Latin names with which Linnæus honoured Edwards's work, that great naturalist has omitted to mention the present subject.

"The Blue Lizard," says Edwards, "is most particular for the structure of it's toes; which have little webs spreading from their sides, not in the nature of web-footed birds, but rather like some sort of flies: these webs I conceive to be a kind of suckers, to enable it to walk on the smooth surfaces of the large leaves of trees or plants. It has a small ridge down it's back, which extends to the tail, where it becomes jagged or toothed. It's whole upper side is of a blueish colour, clouded transversely with lighter and darker shades. It's under side is of a light flesh-colour.

The only information which Edwards adds to this descriptive account, is merely that the

Blue

BLUE LIZARD.

Blue Lizard was brought from the Island of Nevis, in the West Indies; and that his draught, which we have exactly copied, was taken on the copper immediately from nature, and of the size of life.





PORCINE DEER.

Published Sept 1st, 1808, by Harrison. Price, 2s 6d. 7s. 6d. 10s.

PORCINE DEER.

THE Porcine Deer, which is here figured and described from Pennant, was the property of the late Lord Clive, and came from Bengal: the same species is also an inhabitant of Borneo. It was unknown to Linnæus; and, as it should seem, this peculiar species escaped the notice of Buffon, though described by Pennant during the life-time of the illustrious French naturalist. It is the *Cervus Porcinus* of the Linnæan system, and of Schreber; and the 'orcine Deer of Pennant, and other naturalists.

This animal is thus described by Pennant—

“ It has slender trifurcated horns, thirteen inches long, and they are six inches distant at the base. The head is ten inches and a half long; the body, from the tip of the nose to the tail, three feet six inches: the height, from the shoulders to the hoof, two feet two inches; and about two inches higher behind. The length of the tail is eight inches. The body is thick, and clumsy; the legs are fine, and

and slender. The colour, on the upper part of the neck, body, and sides, is brown; the belly, and the rump, are of a lighter colour."

Pennant adds, that "they are taken in square pitfalls, about four feet deep, covered with some slight materials; and that, of their feet, as well as those of the lesser species of Musks, and Antelopes, are made tobacco-stoppers."

There appears to be a variety of the Porcine Deer; the *Cervus Porcinus Maculatus* of the Linnæan system, with which the present animal has been confounded. Buffon, who was, as we have observed, unacquainted with our Porcine Deer, mentions this Spotted Porcine Deer, under the name of the Hog Stag. "I have seen," says he, "at l'Ecole Veterinaire, a small kind of Stag, which was said to have been brought from the Cape of Good Hope. Its skin was interspersed with white spots, like that of the Axis. It was called the Hog Stag; because its legs were thicker, and it had not the same agility or body as the common kind. Its length, from the muzzle, to the extremity of the body, wa
enl:

only three feet four inches and a half. The legs were short, and the feet and hoofs very small; the colour was yellow, mixed with white spots; the eye black, and open, with large black hair on the upper eye-lid; the nostrils black, with a blackish band at the corners of the mouth; the colour of the head the same with that of the belly, only mixed with grey, and brown on the chanfrin and sides of the eyes; the ears very large, garnished on the inside with white hairs, and with smooth hair mixed with yellow on the outside. The horns of this Stag were eleven inches seven lines in length, and ten lines thick. The top of the back was browner than the rest of the body. The tail was yellow above, and white below; and the legs were of a brownish black colour."

The chief essential difference in these two animals—the latter of which seems to have been overlooked by Pennant, as the former was by Buffon—consists in the thickness of the legs; added to the spots, and the slight variations of colour.

Buffon

PORCINE DEER.

Buffon remarks, what is equally applicable to both, that “ this animal seems to approach nearer to the Stag than to the Fallow Deer, as appears from the bare inspection of the horns.”





WALL CREEPER.

WALL CREEPER.

THIS fine bird is the Certhia Muraria, of Linnæus, Gmelin, &c. the Picus Murarius, of Ray and Willughby; the Grimpereau de Muraille, of Brisson and Buffon; and the Wall Creeper, or Spider Catcher, of Edwards. In Germany, it is called Mauer Specht, or Wall Spight, and Kletten Specht, or Creeper Spight; in Denmark, Scopoli; and, in Poland, Dzieciot Murowy.

Edwards, whose excellent figure we have copied on a somewhat reduced scale, supposes this subject, which he etched on the copper immediately from the bird preserved dry, to have been a Hen; because, as he observes, he finds in Brisson a good figure and description of the Cock, which only differs from it, in having the throat black for an inch or more from the lower mandible of the bill. Brisson, who gives the measures of it's parts, which in general were something shorter than in Edwards's bird, remarks that the Female
differs

differs from the Male, only in having the throat white. "The bill," continues Edwards, "is long and slender; a little bowed downwards; and of a black or dusky colour. The nostrils are near the basis of the bill. The top of the head is of a brownish ash-colour. The upper side of the neck, the back, and rump, are of a fine blueish ash-colour. The belly, thighs, and covert-feathers under the tail, are of the same ash-colour, but a shade darker. The tail is composed of twelve feathers of equal length, of a blackish colour: except their tips, which are whitish in the outer feathers, and ash-coloured in the middlemost feathers. The throat, and under side of the neck, are white. The wings are best seen when they are spread. The lesser covert-feathers are of a pleasant red colour, like that of red wine seen in a glass; the inner coverts are also red, but tending to dusky; and the row of outer covert-feathers next above the quills are dusky, bordered with red, so that they appear wholly red when the wings are closed. I counted twenty quills in one of the wings: the outermost shorter, by half, than the next following it; the fifth quill the longest. The quills have their

their outer webs, for half their lengths next their bottoms, of a fine red wine colour: except the three outer, and three innermost, which are blackish; as is the remaining part of the quills toward their tips, except the very tips, which are all edged with ash-colour. Four of the outer quills are marked, each of them, with two white spots on their inner webs; the next within them have only one spot: except these spots, the insides of the quills are dusky. The legs, feet, and claws, are black. It has three toes standing forward, and one backward. The outer toe adheres a little to the middle one, at it's bottom. The hinder toe is strong, as in others of the Creeper kind, in order the better to support them on the sides of walls and trees. The claws are remarkably long."

To this minute description, Edwards adds, that the bird was sent from Turin, where it is called the Mountain Woodpecker, and said to be rare in Piedmont. Willughby, he remarks, has given a very lame and brief description, and bad figure, of this bird; taken from our first modern natural historians, who say it is found

found in England ; but Willughby could never meet with it here. “ Nor,” concludes Edwards, “ do I believe it to be a native, or bird of passage into England ; for, in all my searches, the bird here described is the only specimen I ever saw : therefore, I was willing exactly to figure and describe it, though it makes a plate above my proposed number. It coming late to my hands, it could not be put into its proper place : it should follow the Hoopoe, being near of kin to that species.”

Buffon gives a very good description of the Wall Creeper. “ All the motions,” says he, “ which the Common Creeper performs on trees, this performs on walls : it lodges there ; and there it climbs, hunts, and breeds. By walls, I mean not only those built by man, but those formed by nature, the huge perpendicular rocks. Schwenckfeld says, that it is commonly seen in citadels built on mountains. Kramer remarks, that these birds prefer the haunts of the tombs, and deposit their eggs in human sculls. They fly flapping their wings like the Lapwing ; and, though they are larger than the Common Creepers, they are equally lively

lively and active. Flies, Ants, and particularly Spiders, are their usual food.

“ Belon supposed this species peculiar to Auvergne: but it occurs in Austria, Siberia, Switzerland, Poland, Lorraine, and particularly the part bordering on Germany; and even in England, according to some, though others regard it as at least very rare. On the contrary, it is common in Italy, near Bologna and Florence, but much less frequent in Piedmont.

“ It is chiefly in winter that these birds appear near dwellings; and, if we may believe Belon, they are heard flying at a great distance in the air; descending from the mountains, to lodge on the walls of cities. They keep single; or, at least, by two and two, like most birds that feed on insects: and, though solitary, they are neither weary nor melancholy; so certain it is, that cheerfulness depends more on the original disposition, than on the enlivening influence of society.

“ In the Male, there is a black mark under
the

the throat, which extends to the fore part of the neck, and distinguishes the sex. The upper side of the head and body is of a pleasant ash-colour; the under side, of a deeper cast. The small superior coverts of the wings, are rose-colour; the great ones blackish, edged with rose-colour. The quills are terminated with white; and bordered, from their base to the middle, with rose-colour, which grows more dilute, and almost vanishes on the quills nearest the body. The five first are marked on the inside with two spots of white, more or less pure, and the nine following with a single fulvous spot. The small inferior coverts next the margin are rose-coloured, the others blackish. The quills of the tail are blackish; the four middle ones tipped with dirty grey, and the two outer pairs with white. The bill, and legs, are black.

“ In the Female, the throat is whitish. A subject which I observed had, under it’s throat, a broad mark of light grey; which descended on the neck, and sent off a branch to each side of the head. The Female described by Edwards was larger than the Male described by

by Brisson. In general, this bird is of a size between that of the Blackbird and of the Sparrow. Total length, six inches and two-thirds: the bill, fourteen lines; and sometimes twenty, according to Brisson. The tongue is very pointed; broader at the base, and terminated by two appendices. The tarsus is ten or twelve lines; the toes are disposed three before and one behind; the middle one nine or ten lines, the hind one eleven; and the chord of the arc formed by the nail alone is six lines. In general, all the nails are long, narrow, and hooked. The alar extent is ten lines. The wing consists of twenty quills, according to Edwards; and of nineteen, according to Brisson: and both include the first, which is very short, and ought not to be reckoned a quill. The tail is twenty-one lines; consisting of twelve nearly equal quills: it exceeds the wings six or seven lines.

" Belon positively asserts, that this bird has two toes before and two behind; but he also says, that the tail of the Common Creeper is short. The source of both errors is the same: that naturalist considered these birds as related to

to the Woodpeckers, and he ascribed those characters without examining narrowly. Analogy, which so often conducts to great discoveries, frequently misleads in the detail of observation."





BANDED PIKE-MAN.

Engraved by Harrison, from a Drawing by Mr. J. G. Keulemans

BANDED PIKEMAN.

THIS very beautiful shell, originally figured by Knorr, is denominated by him, a variety of the Tiger's Leg, or the Banded Pikeman. It is a Univalve, of the Turbinated or Spiral Order: and is classed among the Strombi, or Needles, in the Systematic Index of the above named conchologist; who has, in general, followed the arrangement of the celebrated Rumphius. That author, however, names this shell, Strombum Quintum.

With the figure, we shall give the description, of Knorr, as they first appeared together; in which it is curious to observe that, notwithstanding the above name, which we find in the Index, there is a very ingenious sort of apology introduced, for publishing the figure without any particular appellation.

The description to which we allude is almost literally translated. It follows that of the Tiger's Leg, and is thus expressed—

“ This

“ This is also a Screw Shell, of equal beauty with the preceding, which it perfectly resembles in its configuration; but is different in its colour, being yellow bordering on red, and marked its whole length with white waved lines. The imagination of mankind has not yet invented names for every different species of Shell-Fish; and it is by no means our intention to augment the list of those who have invented them: for this reason, we do not give any particular name to this; but content ourselves with imitating the Dutch, who are accustomed, on similar occasions, to express, in their catalogues—“ Another of the same species, but differently marked.”—This, therefore,” continues Knorr, “ we wish the reader would have the goodness to recollect in all cases where we place only the general name of the class to which the Univalve, the Bivalve, or the Multivalve, belongs: it being what we shall continue to do, in cases where a particular denomination is not generally adopted; or, rather, in those where modern authors have admitted a change of name, which renders the ancient doubtful. For it is a fact, that all sorts of people, who have not always the faculty of thinking

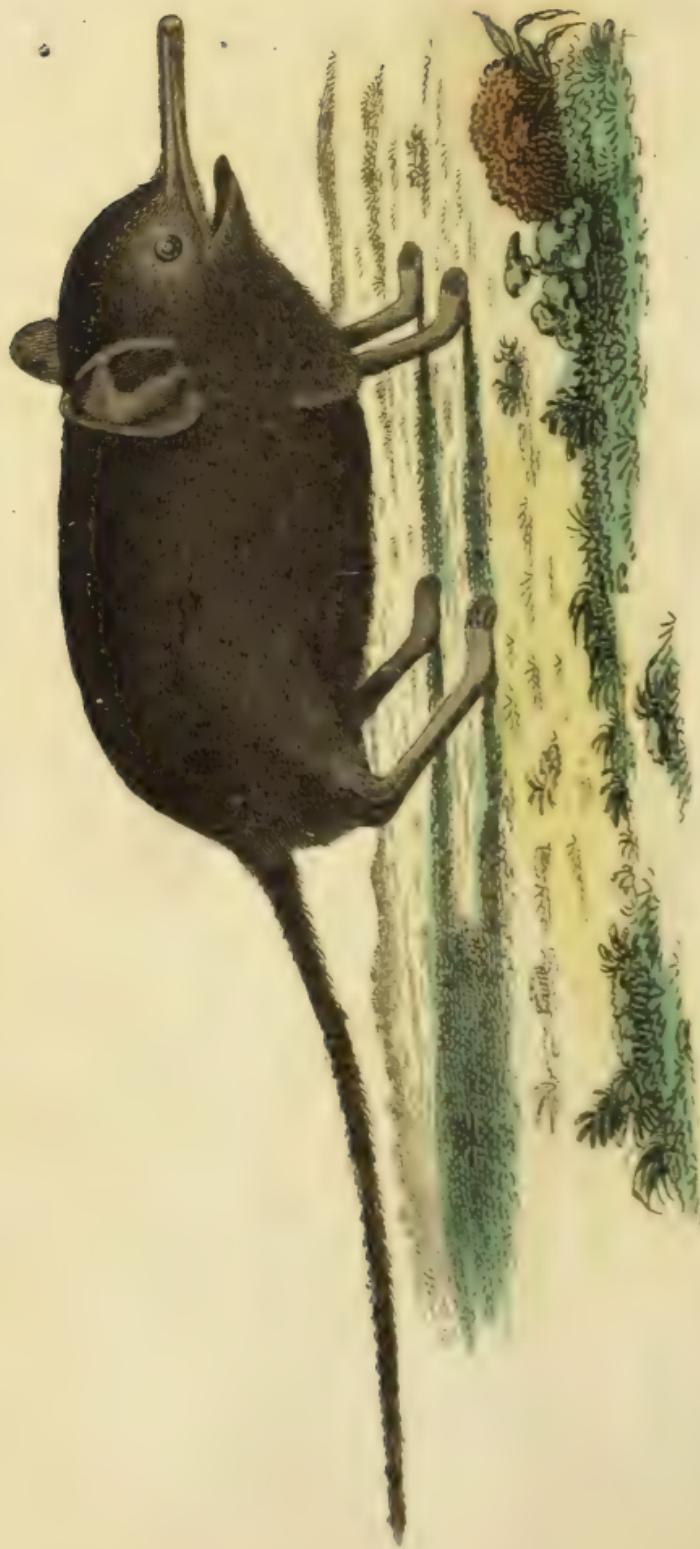
BANDED PIKEMAN.

thinking systematically, or of classing with exactitude, have made great confusion in their collections of shells: to which they have, most of them, given names according to their respective fancies; and these being retained, have occasioned, in the denominations, all sorts of changes, as well with respect to trifles as to essentials."

Our author remarks, that all these species of shells have a thin covering over the mouth, or opening; that the flesh is poisonous; and that it is garnished with a small bone, or needle, which is also venomous.

1965 INDEXES





ELEPHANT SHREW.

Published for the Author by Harrison Hall, Finsbury-street, Strand.

ELEPHANT SHREW.

OF this curious Shrew Mouse very little is known; and, till lately, it does not appear to have been noticed by naturalists. Neither Linnæus, nor Buffon, were at all acquainted with it; but Pennant, who gives two figures of this animal, drawn by Colonel Paterson, informs us, on the authority of that ingenious traveller, that it “ inhabits the neighbourhood of the Cape of Good Hope; and that it is called the Elephant Shrew, from it’s proboscis-like snout.”

One of the figures engraved by Pennant, represents the animal with it’s snout turned upwards, the other is that which we have adopted. It is delineated of the natural size. If this Shrew has the faculty of dropping as well as elevating it’s snout, of which we have some doubt; it would, perhaps, have been best figured in that action, as most resembling the Elephant’s proboscis, from which it is named. As the whole race of Shrews are remarkable for

for having long snouts, this particular species may be considered as distinguished from the rest by a most extraordinary extension of the common characteristic of these animals.

The Elephant Shrew is simply described as having a very long, slender, and little nose; the whole animal being of a deep brown colour.

"This animal," Pennant remarks, "has been very ill represented by Petiver, in his *Gazoph.* Dec. iii. tab. xxiii. fig. 9. under the tible of *Mus Araneus Maximus Capensis.*"

John Gell
Robert Gell



4



LESSER DUSKY PARROT.

Length about 10 inches. Wings 5 1/2 inches.

LESSER DUSKY PARROT.

WE have ventured to call this the Lesser, and not the Little, Dusky Parrot, as it is named by Edwards; because, in fact, though it be rather less than the Dusky Parrot, or *Psittacus Sordidus* of Linnæus, it is by no means a very small bird of the Parrot race, as the word Little might seem to imply. In the Linnæan index to Edwards, furnished by Linnæus himself, this bird is called *Psittacus Spectrum*, as well as the Great Black Cockatoo, which stands next to it in the list; a mistake, as we apprehend, either in transcribing or printing. Indeed, Gmelin gives this Little Dusky Parrot of Edwards, as the *Psittacus Purpureus* of the Linnæan system; and it is the Violet Popinjay of Buffon.

Edwards—who, in describing the Dusky Parrot, had said that “it is about the bigness of the Common Blue Pigeon bred in our dove-houses”—tells us, that his Little Dusky Parrot, also, “was about the size or quantity of the true, Wild, or Dove-House Pigeon, or rather less.

LESSER DUSKY PARROT.

less. The bill," continues he, "is dusky, with angles and orange-coloured spots on the sides of the upper mandible: the nostrils are surrounded with small red feathers. The top of the head, and sides below the eyes, are black, with a little gloss of blue on the crown. The eyes are of a dark colour, surrounded with a narrow space of bare skin, of a light blueish colour. Immediately beneath the head, passes from the throat, quite round to the hinder part of the head, a ring of a fille-mot colour; marked with dusky, small, oblong spots. The neck behind, the back, rump, and covert-feathers of the wings, are of a dark brownish black. The greater quills of the wings, and some of the next row of feathers above them, are of a fine ultramarine blue; the quills next the body, with the coverts next above them, are dusky, with a little blueness on their edges; the insides of the wings are of a lighter blue than the upper; and the tips of the quills are black. The tail appears wholly of a dark blue colour on it's upper side, when closed: the inner webs of the tail-feathers are red; except their tips, which are blue; and the covert-feathers of the tail, beneath,

neath, are red. The breast, belly, and thighs, appear of a purple colour; the dusky feathers being fringed with purple. The legs and feet are covered with a dusky, flesh-coloured, scaly skin.

"This curious bird," adds Edwards, "is said to be a native of Surinam. It was, when living, in 1761, the property of my curious and worthy friend John Fothergill, M. D. of London; who was pleased to send it me when it died: I had taken a sketch of it while living. I suppose it to be a very rare bird; it being the only one of the species that I have met with: and, I think, I may safely pronounce it, not till now either figured or described by any author."

According to Buffon, however, this bird does not appear to be at all scarce. "It is called," says he, "both in America, and in France, the Violet Parrot. It is common in Guiana; and, though handsome, is not much esteemed, because it never learns to speak. We have," proceeds Buffon, "already remarked, that Brisson confounds this with the

LESSER DUSKY PARROT.

Red and Blue Parrot of Aldrovandus, which is a variety of our Crick. The wings and tail are of a fine violet. The head, and the borders of the face, are of the same colour; which is waved on the throat, and melted into the white and lilac: a small red streak edges the front. All the upper side of the body is brown, obscurely tinged with violet; the under side of the body is richly clouded with blue violet, and purple violet; and the lower coverts of the tail are a rose-colour, which also tinges exteriorly the edges of the outer quills of the tail, through their first half."





TEA TREE.

- Subtended by Mr. W. H. Worrell, C. M., & others.

TEA TREE.

A Mere catalogue of authors, who have mentioned this celebrated tree with the titles of their respective works, would alone occupy a greater number of pages than can with propriety be devoted to our description of the present article ; about which, as commonly happens in matters much treated of, very great uncertainty is still found to prevail. Whether the Latin botanical name Thea, or the common English appellation Tea, are derived from the Japanese Tsjaa, or the Chinese Thet, has afforded matter for discussion ; but, though we embrace the latter opinion, we consider the fact as of little importance : it is sufficient that, by some such name, the leaves of this tree are known and distinguished in most parts of the world.

The size of the Tea Tree has also been very differently represented by various writers. Le Compte tells us, it is found from two feet to two hundred, and so thick that two men

can

can scarcely grasp the trunk in their arms; and Du Halde quotes a Chinese author, who describes the height of different Tea Trees, from one to thirty feet: while Kämpfer, who seems chiefly to be relied on, confines the full growth to the height of a man; which corresponds with what even Le Compte afterwards observes, respecting the Tea Trees which he saw in the Province of Fo-kien, where they did not exceed five or six feet.

Whether the different varieties of Teas, generally divided into Green and Bohea, are both produced by the same Tree, or by varieties, is another matter by no means established. It is however, chiefly held, by what appear the best authorities, that there is only one species of this plant; the difference of Green and Bohea Teas, with all their respective known varieties, depending on the nature of the soil, the culture of the plant, the age of the leaves when gathered, and the manner of drying them. That these circumstances will have considerable influence, is not to be denied: yet we cannot but incline to an opinion, that some varieties in the Tree itself may hereafter be found to exist.

exist. The great Linnæus, indeed, has in some measure adopted this idea. He says, that there are two species: the Bohea, the corolla of which has six petals; and the Viridis, or Green Tea, which has nine petals.

Even the class to which the Tea Tree must be referred, is disputed—Linnæus arranged it under the class of Polyandria, and order of Monogynia. Into this mistake, as it is called, he is said to have been led, by having only specimens of the dried flower to examine: but, it is ingeniously remarked, if Linnæus has thus fallen into error, it is surprizing that he has not been corrected by one who had the best opportunity of examining the matter; and Sir Charles Thunberg, one of the most distinguished pupils of that illustrious botanist, who resided sixteen months in Batavia and Japan, and has given a full botanical description of the Tea Plant, expressly says that it has only one style. Several of our British botanists, however, on the other hand, refer it to the order of Trigynia; deriving their authority from a plant in the Duke of Northumberland's

thumberland's garden at Sion House, which had three styles.

From this plant our annexed figure is an accurate drawing. It is said to be the first Tea Tree which ever flowered in Europe; though many have grown in England, and some to a considerable size. The largest is supposed to be in the Royal Garden at Kew. The plant at Sion House flowered in October 1771.

The leaves of this valuable evergreen, twenty-five million pounds of which were last year sold in England by the East India Company, are about an inch and a half long : they are narrow, indented, and tapering to a point, like those of the Sweet Briar ; and their colour is a dark green. The root is like that of the Peach Tree ; and it's flowers resemble those of the White Wild Rose. The stem spreads into many irregular branches. The wood is hard, of a whitish green colour ; and the bark, which is greenish, has a bitter, nauseous, and astringent taste. The fruit is small, and contains several round blackish seeds about the size of a large Pea.

Sir

Sir George Staunton, Bart. in his Authentic Account of an Embassy from the King of Great Britain to the Emperor of China, gives the following particulars respecting the Tea Plant, the soil suited to it's culture, the form of the plant, and the method of curing it. It first occurred in the Journey from Chu-san to Canton.

“ On the sides and tops of earthen embankments dividing the garden-grounds, and groves of oranges, the Tea Plant was for the first time seen growing like a common shrub scattered carelessly about. Of this interesting plant, there are not only so many drawings published in a variety of books of travels, and of natural history, but also so many specimens of it are met with growing in public and private gardens in divers parts of Europe, that it were superfluous to give a delineation of it in this work. In China, wherever it is regularly cultivated, it rises from the seed sown in rows, at the distance of about four feet from each other, in land kept free from weeds. It is seldom sown on flat or marshy ground, which is reserved for rice. Vast tracts of hilly land,

land are planted with it; particularly, in the province of Fo-chen. Its perpendicular growth is impeded, for the convenience of collecting its leaves; which is done first in spring, and twice afterwards in the course of the summer. Its long and tender branches spring up almost from the root without any intervening naked trunk. It is bushy, like a Rose Tree; and the expanded petals of the flower bear some resemblance to that of the Rose. Every information received concerning the Tea Plant, concurred in affirming that its qualities depended both on the soil in which it grew, and the age at which the leaves were plucked off the tree, as well as on the management of them afterwards. The largest and oldest leaves, which are the least esteemed, and destined for the use of the lowest classes of the people, are often exposed to sale, with little previous manipulation, and still retaining that kind of vegetable taste which is common to most fresh plants, but which vanishes in a little time, while the more essential flavour, characteristic of each particular vegetable, remains long without diminution. The young leaves undergo no inconsiderable preparation before

before they are delivered to the purchaser. Every leaf passes through the fingers of a female, who rolls it up almost to the form it had assumed before it became expanded in the progress of its growth. It is afterwards placed on thin plates of earthenware, or iron, made much thinner than can be executed by artists out of China. It is confidently said in the country, that no plates of copper are ever employed for that purpose. Indeed, scarcely any utensil used in China, is of that metal, the chief application of which is for coin. The earthen or iron plates are placed over a charcoal fire, which draws all remaining moisture from the leaves, rendering them dry and crisp. The colour and astringency of Green Tea is thought to be derived from the early period at which the leaves are plucked; and which, like unripe fruit, are generally green and acrid. The Tea is packed in large chests, lined with very thin plates of lead, and the dried leaves of some large vegetable. It is too true, that the Tea is pressed down into those chests by the naked feet of Chinese labourers, as grapes are pressed by the wooden shoes of European peasants; in which last case, the juices

are

are purified by the subsequent fermentation. Notwithstanding this uncleanly operation of Chinese packers, the upper ranks in China are as fond of Tea as the people are, and particularly solicitous in their choice of it: that of a good quality is dearer in Pekin than in London. It is sometimes made up into Balls, as has been already mentioned. A strong Black Extract, also, is frequently made from it. Many virtues are attributed to Tea, which is in universal use throughout the empire. The warm infusion of any aromatic herb is, no doubt, likely to be grateful to persons exhausted by fatigue, frequently occasioning a violent perspiration; as well as to stomachs labouring with indigestion. One of the best qualities of it, perhaps, is that the taste for it, and the habit of drinking it, at all times lessens the relish for fermented and inebriating liquors. The poor infuse the same leaves several times over. This plant is cultivated in several of the provinces of China, but seldom more northerly than thirty degrees beyond the Equator. It thrives best between that parallel and the line that separates the temperate from the torrid zone; though it is to be found, also, in the

Chinese province of Yunnan, to the southward of it. Several specimens of the Tea Plant, and of others chiefly cultivated in China, were procured by the Ambassador, and sent to Bengal; in some parts of which, his Excellency had been informed, were districts adapted for their cultivation. Such immense quantities of Tea are raised in China, that a sudden failure of a demand from Europe, would not be likely to occasion any material diminution of its price at the Chinese markets; though it might be attended with inconvenience to the particular cultivators who are in the habit now of supplying the Canton merchants with that article for exportation.

“ A plant very like the Tea,” Sir George Staunton adds, “ flourished at this time on the sides and the very tops of mountains, where the soil consisted of little more than fragments of stone, crumbled into a sort of coarse earth by the joint action of the sun and rain. The Chinese call this plant Cha-whaw, or Flower of Tea, on account of the resemblance of one to the other; and because its petals, as well as the entire flowers of the Arabian Jessamine, are sometimes

sometimes mixed among the Teas, in order to increase their fragrance. This plant, the Chawhaw, is the *Camellia Sesanqua* of the botanists; and yields anut, from whence is expressed an esculent oil equal to the best which comes from Florence. It is cultivated, on this account, in vast abundance; and is particularly valuable, from the facility of it's culture in situations fit for little else."

This, we may remark, corresponds with what has been observed by Kæmpfer; who tells us, that "the leaves of a species of *Tsubakki*," which Linnæus denominates *Camellia*, "are preserved, and mixed with Tea, to give it a fine flavour."

On Lord Macartney's first interview with a Chinese Viceroy at Ta-coo, "the Tea," says Sir George Staunton, "was brought in cups with covers, on oblong saucers, and infused in each cup separately, the leaves remaining at the bottom of the cup; the simple infusion of this herb being thought by the host, if not by the guests, preferable to it's mixture with cream and sugar."





TERNATE BAT.

Published Jan. 1. 1808 by Humphrey Linn. No. 11. Fleet-street.

TERNATE BAT.

THOUGH, with the figure, we have taken the name, of this curious animal, from Pennant; it is to be observed, that there are two Ternate Bats, called by Buffon, and others, the Rousette, and the Roulette, and that the first of these is what we have represented. It is the *Vespertilis Vampyrus*, of Linnæus; the *Canis Volans Ternatanus Orientalis*, of Seba; the Great Bat, of Edwards, and of the British, Ashmolean, and Leverian Museums; the *Pteropus Rufus*, of Brisson; the *Vespertilio Ingens*, of Clusius; and the Rousette, of Buffon, Schreber, &c.

“ The Rousette,” says Pennant, “ is a Bat with large canine teeth; four cutting teeth above, and the same below. It has a sharp black nose, and large naked ears. The tongue is pointed, and terminated by sharp aculeated papillæ. The exterior toe is detached from the membrane; and the claw is strong and hooked. There are five toes on the

the hind feet; and the talons are very crooked, strong, and compressed sideways. It has no tail. The membrane is divided behind quite to the rump. The head is of a dark ferruginous colour; on the neck, shoulders, and under side, it is of a much lighter and brighter red; on the back, the hair is shorter, dusky, and smooth; and the membranes of the wings are dusky. It varies in colour: some are entirely of a reddish brown; others are dusky. This now described was one foot long; and its extent, from tip to tip of the wings, four feet: but they are found vastly larger. This species is not gregarious; yet they are found in numbers on the same tree, by accidentally meeting there in search of food. They fly by day; and are seen arriving, one by one, to the spot which furnishes subsistence. If by any accident they are affrighted, they will then quit the tree in numbers, and thus fortuitously form a flock. It is different with the other species.

"The Rougette," continues Pennant, "is a Bat with the same kind of teeth as the other, and the shapes of the head and body are the same.

same. The whole body, and head, are cinereous, mixed with some black; but, on the neck, there is a great bed of lively orange, or red. The size is much less; the extent of wings being little more than two feet.

" They are both inhabitants of the same countries; and agree in their food, but differ in some of their manners, which I shall distinguish in the following history of them.

" These monsters inhabit Guinea, Madagascar, and all the islands from thence to the remotest in the Indian Ocean. They are found, again, in New Holland; the Friendly Islands; the New Hebrides; and New Caledonia. The Rougettes fly in flocks, and perfectly obscure the air with their numbers: they begin their flight from one neighbouring island to another, immediately on sun-set; and return, in clouds, from the time it is light, till sun-rise. They lodge, during the day, in hollow trees. Both live on fruits; and are so fond of the juice of the Palm Tree, that they will intoxicate themselves with it till they drop on the ground. Notwithstanding the size of their teeth,

teeth, they are not carnivorous. Mr. Edwards relates, that they will dip into the sea for fish. I suspect that fact: but it is known, that they skim the water with wonderful ease; perhaps, in sportive moods. They also frequent that element, to wash themselves from any vermin which may adhere to them. They swarm like Bees; hanging near one another from the trees in great clusters; at least five hundred were observed hanging, some by their fore, others by their hind legs, in a large Casuarina Tree, in one of the Friendly Islands. When shot at, they flew from the boughs very heavily, uttering a shrill, piping note: others, again, arrived, at intervals, from remote places to the tree. In New Caledonia, the natives use their hair in ropes, and in the tassels of their clubs; interweaving it with the threads of the *Cyperus Squarrosus*. The Indians eat them, and declare the flesh to be very good: they grow excessively fat at certain times of the year. The French, in the Isle de Bourbon, boil them in their bouillon, to give it a relish; the Negroes have them in abhorrence. Many of the Rousettes are of an enormous size: Beeckman measured one, the extent of which,

from

from tip to tip of the wings, was five feet four inches; and Dampier another, which extended farther than he could reach with stretched-out arms. Their bodies, are from the size of a Pullet to that of a Dove. While eating, they make a great noise. Their smell is rank. Their bite, resistance, and fierceness, when taken, are very great. They bring but one young at a time. The ancients had some knowledge of these animals: Herodotus mentions certain winged wild-beasts, like Bats, that molested the Arabs, who collected the Cassia, to such a degree, that they were obliged to cover their bodies and faces, all but their eyes, with skins. It is very probable, as M. De Buffon remarks, that it was from such relations the Poets formed their fictions of Harpies."

Linnæus gives this species the title of Vam-pyre, conjecturing it to be the kind which draws blood from people in their sleep: but M. De la Nux, who resided fifty years in the Isle de Bourbon, where they abound, and has greatly elucidated their history, compleatly acquits them of this charge, which Buffon thinks

TERNATE BAT.

thinks only applicable to a species found in South America. Pennant is of opinion, that "this thirst after blood is not confined to the Bats of one continent, nor to one species." He does not, however, fix the faculty of drawing it on any particular species.





LITTLE OWL.

Illustrated from a sketch by Harrison. Nov. 24, 1878. This plate.

LITTLE OWL.

THIS bird, which we have figured from Edwards, who says it was about the size of the Mistle Bird, or Greater Thrush, came down a chimney in St. Catharine's, near the Tower of London; and was supposed to be a foreign bird escaped from on board some ship in the River Thames. However, after Edwards had made the original drawing, Peter Theobald, Esq. of Lambeth, informed him that just such another Owl came down one of his chimneys; and this induced Edwards to suppose it a native of England, though little known. Willughby, he remarks, has not made it so, though he has described two or three species of it: none of them, however, exactly agree with this. The bird being alive, when Edwards made his observations, enabled him to render his description more perfect. He imagines, that the male may be more beautiful. This was a hen bird; and, on being opened, was found to have many eggs.

“ The

“ The head,” says Edwards, “ was round, and large in proportion, as it is in all birds of the Owl-kind. The fore part of it, or face, is divided from the hinder part of the head by a line in form of a heart. The face is of a whitish colour, with some longish dusky spots. The bill is placed in the middle of it, and is hooked as in Hawks; having a skin partly covering the upper mandible, in which the nostrils are placed: it is of a horn-colour, a little yellow at the point. The eyes have their irides of a yellow colour. Longish hairs spring from the root of the bill all round it. The top and hinder part of the head is covered with dark-brown feathers, having whitish marks down their middles. The back, wings, and tail, are also of a dark brown, variegated with lighter brown and whitish spots; which are round on the lesser coverts of the wing, longish on the outer webs of the quills, and semilunar and large, between the back and wings, and on the rump: the dark and light brown crosses the tail alternately, in bars. The ridge of the wing is white, the inner coverts of the wings are black and white, in a small mixture; and the insides of the quills are

are of an ash-colour, with white spots both on their inner and outer webs. The under side of the bird is white, from the throat to the covert-feathers of the tail ; it is spotted on the breast and sides with large black spots ; the legs and feet are covered to the claws, with white feathers which appear like hair ; and the claws are strong, crooked, and black."

The Little Owl inhabits Europe ; and is found in North America, from Hudson's Bay to New York. It is the *Strix Passerina*, of Linnæus, Gmelin, Latham, &c. the *Noctua Minima*, of Gesner and Aldrovandus ; and the *Noctua Minor*, of Ray, Klein, and Brisson. The Greeks and Romans are supposed, by Buffon, who calls it the Chevêche, or Petite Chouette, to have confounded it with the Scops Owl, or Asio. This is the case in the modern languages : both are termed Zuetta, or Civetta, in Italian ; Sechuza, in Spanish ; Mocho, in Portuguese ; Kautzlein, in German ; and Szowa, in Swedish.

It is said to be a solitary bird ; chiefly residing in ruinous edifices, and caverns, and never

LITTLE OWL.

never lodging in hollow trees: "nor is it," according to Buffon, "entirely a bird of night; but sees much better in the day than the other nocturnal birds, and even chases the Swallows and other small birds, though with very little success. It is," he adds, "more fortunate in the search for Mice, which it swallows not entire, but tears them in pieces with its bill and claws; and it even plucks the birds neatly before it eats them: and in this instinct it differs from the other Owls. It lays five eggs, which are spotted with white and yellow; and constructs its rude and almost bare nest in the holes of rocks and old walls."





CARNATION.

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CARNATION.

IT has been observed, by Dr. Smith, that there is much confusion in the Linnæan genus *Dianthus*, to which the Carnation must be referred, occasioned by the incorrectness of authors. The name of this genus, which comprehends the Sweet Williams and Gilliflower, as well as the Pinks and Carnations, is derived from the Greek $\Delta\tauος \alphaνθος$; that is, Jove's Flower, or Divine Flower: on account of the rich colour and exquisite fragrance in some of the species.

Modern Florists divide the Carnation into four classes: 1. Flakes, which have only two colours, and large stripes going quite through the leaves; 2. Bizzars, the flowers of which are striped or variegated with three or four different colours in irregular spots and stripes; 3. Picquettes, or Picquettées, which have a white ground, and are spotted or pounced with scarlet, red, purple, or other colours; and 4. Painted Ladies, the petals of which are a red

or purple colour on the upper side and white beneath. In each of these classes, there are numerous varieties; particularly the third, which some years ago was held in most estimation by Florists. Of late years, however, the Flakes have been in greatest request.

“ To enumerate,” says Miller, in his celebrated Gardener’s Dictionary, “ the varieties of the Carnation, would be needless: since they are not permanent, and every country produces new flowers almost every year; which, though at first raising they may be greatly valued, in two or three years become so common as to be of little worth—especially if they are defective in any one property—and are turned out, to make room for new comers. For the variety of pompous names, we refer, therefore, to the Lists published yearly by Florists and Nursery-men; who either raise these flowers from seed, or import them from abroad.

“ The following are what the Florists call the good properties of a Carnation.

“ 1. The stem of the flower should be strong, and able to support the weight of the flower without hanging down.

“ 2. The petals should be long, broad, and stiff, and pretty easy to expand; or, as the Florists term it, should make free flowers.

“ 3. The middle of the flower should not advance too high above the other parts.

“ 4. The colours should be bright, and equally marked all over the flower.

“ 5. The flower should be very full of petals; so as to render it, when blown, very thick in the middle, and the outside perfectly round.

“ To this we may add, that the stem should not only be strong, but straight, and not less than thirty, or more than forty-five, inches high. The flower should be, at least, three inches in diameter; and the petals well formed, neither so many as to appear crowded, nor so few as to appear thin. The lower or outer circle

circle of petals, commonly called the guard leaves, should be particularly substantial: they should rise perpendicularly about half an inch above the calyx, and then turn off gracefully in a horizontal direction, supporting the interior petals, which should decrease gradually in size as they approach the centre, which should be well filled with them. All the petals should be regularly disposed, and lie over each other in such a manner as that their respective and united beauties may meet the eye all together: they should be nearly flat; or, at most, have a small degree of inflexion at the broad end. Their edges should be perfectly entire; without notch, fringe, or indenture. The calyx should be at least an inch in length; sufficiently strong at top to keep the bases of the petals in a close and circular body. The colours should be distinct; and the stripes regular, narrowing gradually to the claw of the petal, and there ending in a fine point. Almost one half of each petal should be of a clear white, free from spots."

The flower which we have figured, in the annexed print, was about three inches and a half

half in diameter. It blew, at Islington, in 1799, under the culture of Mr. Bland, a respectable Carpenter of that place, as well as a skilful Florist; and was the Prize Flower, last year, of a Society of Florists, to which he belongs. This variety is known by the name of Terry's King, in the Catalogues of the London Florists and Nursery-men; an appellation which it has derived from being originally blown by a person of the name of Terry.

“ The Carnation, or *Dianthus Caryophylus* of Linnæus, is either propagated from seeds, by which new flowers are obtained; or from layers, for the increase of those sorts which are worth preserving. It may also be increased by cuttings, and pipings, like Pinks; but, in general, not so successfully as by layers, unless the operation be performed on a hot-bed under glasses.

Those large Carnations which require the greatest skill to have them in perfection, have not, of late years, been so much in esteem as formerly; and those which do not break the pods, and are termed Whole-Blowers, now obtain

tain the preference. These are generally planted in pots, and treated in the same way as the large flowers, but require much less trouble. Indeed, though the most valuable of these flowers are usually planted in pots, and carefully treated, many of the Whole-Flowers, may be planted in beds, or borders, of the flower garden; where they are some of the principal ornaments, from the beginning of July to the middle of August. This is particularly the case, where the several colours are properly intermixed: for the Flakes, and Bizarrs, should be intermixed with the Picquettes; and not planted separate, unless where intended for seeds, when the finest of each sort should be planted in beds at a distance from each other, that they may be kept distinct. Where the sorts are blended together, there will be an admixture of their farina; so that the seeds will vary, and not produce the particular kinds: though Flake Flowers are never known to arise from Picquettes, nor Picquettes from Flakes.





CAPE VERDE BOAR

CAPE VERDE BOAR.

BUFFON describes this animal under the appellation of the *Æthiopian* or Cape Verde Boar; and says, that the celebrated M. Allamand, Professor of Natural History at Leyden, sent him an engraved figure, which we have also copied, as well as the following account—

“ I believe, Sir, that the Wild Boar, represented in the plate which I sent you, is the same with that pointed out by you under the denomination of the Wild Boar of Cape Verde. This animal is still living—May 5, 1767—in the Menagerie of the Prince of Orange. I visit him occasionally, and always with fresh pleasure. I cannot help admiring the singular form of his head. I have written to the Governor of the Cape of Good Hope; begging him, if possible, to transmit me another: but of this I have little hope; because, even at the Cape, it was regarded as a monster. We tried to make the one in our possession copulate with a sow; but, as soon as she was presented

presented to him, he darted on her with fury, and tore her to pieces."

M. Pallas, and M. Vosmäer, have each used the same figure, and each of them have described this animal.

"M. De Buffon," says Professor Allamand, in his Addition to the description of this animal by Buffon, "has shewn, in his history of the Hog, that he eludes all those methodical distributions into classes and genera, the distinguishing characters of which are derived from particular parts of the body. Though his reasons are not to be answered; they would have acquired additional force, if he had been acquainted with the animal under consideration. It is a Wild Boar sent from the Cape of Good Hope, in the year 1765, to the Menagerie of the Prince of Orange, which has hitherto been unknown to the naturalists. To M. Tuibagh, Governor of the Cape of Good Hope, we are indebted for this animal; which, he remarks, was taken about two hundred leagues from the Cape, and was the first which had ever been seen there alive. The last

last year, however, he sent another, which is still living; and, in 1767, he transmitted a skin, of which we have only been able to preserve the head. These circumstances seem to indicate, that this animal is not rare in it's native country. I know not whether Kolben means to speak of these Boars in the following passage—"In the country occupied by the Dutch, we rarely meet with Wild Hogs: as there are few woods, which are their common retreats, they have no motive to frequent these territories. Besides, the Lions, Tigers, and other rapacious animals, prevent the multiplication of the Hogs, by devouring great numbers of them."—He adds no description; and, therefore, no conclusion can be drawn. He even ranks among the number of Cape Hogs the Large Ant-Eater, which is an American animal, and has no resemblance to the Hog. What credit is due to an author so ill informed?

"The body of our African Boar resembles that of the European kind: but it differs widely in the form of the head, which is of an enormous size. The most conspicuous

objects

objects are the large tusks which spring from each side of the upper jaw, and are directed almost perpendicularly upward. They are nearly seven inches long, and terminate in a blunt point. Two similar tusks, but smaller and thinner, rise from the under jaw, and apply themselves exactly to the external side of the superior tusks, when the mouth is shut. These are powerful arms; which he may use to advantage in his native country, where he must be often exposed to the attacks of carnivorous animals. His head, which is large and flat before, terminates in an ample snout, nearly equal in diameter to the breadth of the head, and of a hardness which approaches to that of horn. He uses it, like our Hogs, in digging the earth. His eyes are small; and situated so far forward in the head, that he can only see straight before him. They are nearer each other, and the ears, than in our European Boars. Below the eyes, there is a depression in the skin, which forms a kind of wrinkled sac. The insides of his ears are closely covered with hair. A little lower, and near the side of the eyes, the skin rises, and forms two excrescences: which, when viewed at a certain

certain distance, have a perfect resemblance to a couple of ears ; being of the same size, as well as figure, though not moveable, and lying nearly in the same plane with the forehead. Still lower, between these excrescences and the tusks, there is a large wart on each side of the head. It is easy to perceive, that a configuration of this kind must give a very singular aspect to the animal. When viewed in front, we think we see four ears on a head which has no resemblance to that of any known animal, and inspires terror by the largeness of it's tusks.

" Pallas, and Vosmaer, who have given good descriptions of this Boar, tell us that, when he arrived in Holland, he was very mild and tame ; and that, as he had been several months on board the vessel, and had been taken young, he was become almost domestic : but that, when pursued by strangers, he retired slowly backward, and presented his front with a menacing air ; and even those that were daily near him were not without apprehensions of danger. One day, he conceived a resentment against his keeper ; whom he wounded so desperately

desperately in the thigh with his tusks, that the poor man died next day. To prevent similar accidents, he was taken out of the Menagerie, and so closely imprisoned that no person could approach him. He died in about twelve months; and his skin is preserved in the Prince of Orange's Museum. The other, which is now in the same Menagerie, is still very young, and his tusks exceed not two inches in length. When allowed to come out of the place where he is confined, he testifies his joy by leaping, bounding, and running, with much more agility than our Hogs. On these occasions, he carries his tail perfectly erect. The inhabitants of the Cape, on account of his swiftness, give him the denomination of the Hart Looper, or Courser.

" This animal unquestionably forms a genus distinct from all the other known races of Hogs. Though he resembles them in the body, the want of cutting teeth, and the singular structure of the head, are characters too marked to be ascribed to the influence of climate; especially, as there are Hogs in Africa, which differ from our's by being smaller only.

Besides,

Besides, it would appear that he cannot produce with our Hogs. A Guinea Sow was presented to him ; after smelling her for some time, he pursued her into a narrow place, from which she could not escape, and tore her in pieces with his tusks. He afterwards abused a Common Sow to such a degree, that she was carried off, in order to save her from destruction. It is wonderful that this animal, which seems not to be rare in it's native country, has not been mentioned by any traveller ; or, at least, in terms so vague, that no idea can be formed of it. Flacourt tells us that, in Madagascar, there are Wild Boars which have two horns on the side of the nose, resembling two callosities ; and that these animals are nearly as dangerous as the Wild Boars of France. M. De Buffon imagines, that this passage relates to the Babiroussa, though extremely ill described ; but what Flacourt adds, that these animals are dangerous, seems to correspond better with our African Boars. M. Adanson, when speaking of a Wild Boar which he saw in Africa, expresses himself in these terms—“ I saw,” says he, “ one of those enormous Wild Boars peculiar to Africa ; and which,

which, I believe, have never been mentioned by any naturalist. It was black, like the European Wild Boar, but vastly larger in size. It had four large tusks; the two superior of which bent in a semicircular form toward the front, and had the appearance of horns."—M. De Buffon supposes, that M. Adanson means to describe the Babiroussa: yet, were it not for his authority, I should have been led to believe, that M. Adanson intended to point out our African Boar; for, if he had the Babiroussa under his inspection, I cannot comprehend how he should remark, that it had never been mentioned by any naturalist. He is too much conversant in Natural History, not to know that the Babiroussa has been often described, and that its head is found in almost every Museum in Europe. But, in Africa, there is, perhaps, another species of Wild Boar, with which we are still unacquainted, and was the animal seen by M. Adanson. This conjecture is supported by the description which M. Daubenton has given of a part of the jaws of a Cape Verde Wild Boar. His remarks clearly prove, that it differs from our Boar, and would apply directly to the one

under

under consideration, if there had not been cutting-teeth in each of these jaws."

Buffon, after admitting into his Supplement the above description and remarks of Professor Allamand, concludes with observing, that he willingly assents to most of the reflections. "But," he adds, "I persist in believing, as himself at first believed, that the Cape Verde Boar, which I mentioned, and the jaws described by M. Daubenton, belong to the same species, though the former had no cutting-teeth; for in no animal is the number and order of the teeth so various as in the Hog-kind. This difference alone seems not sufficient to constitute two species of the African Wild Boar, and that of Cape Verde; especially, as all the other characters of the head appear to be the same."

We have retained the original name of this animal, which Buffon has since denominated the African Wild Boar. It seems, however, to be the opinion of most naturalists, that there are two species; and that the Cape Verde Boar is the *Sus Africanus* of Linnæus, while the present

sent animal is in fact the *Sus Æthiopicus* of the Linnæan system. In this manner, at least, they are distinguished by Pennant.

On this subject it would be difficult to decide, without a better knowledge than seems to be at present possessed of both animals. The figure certainly corresponds with the description of the living animal, as it was seen by Professor Allamand, in the Menagerie of the Prince of Orange; and whether it be, in reality, the Cape Verde Boar, or another species, or variety, which has obtained the denomination of the African or Æthiopian Boar, is a matter of inferior importance, on which we shall not venture any opinion.

Vosmaër, who calls it the Wild African Boar, or the Boar with a large Snout, says that the length of the body is about four Rhenish feet; and that the colour of the head is blackish, but the back and belly are a bright reddish grey. The hoofs are black.





SAPPHIRE-CROWNED PARROT.

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SAPPHIRE-CROWNED PARROT.

THIS bird, we are informed by Edwards, came from the Island of Sumatra, in the East Indies; and was presented to him, well preserved dry, by a gentleman of his acquaintance, who brought it from thence to London. "It is," says Edwards, "one of the least and most elegant birds of the Parrot-kind that I have met with. I have it now in my small collection: it is, undoubtedly, a non-descript."

The description given by Edwards, to accompany his excellent figure, which we have copied, is literally as follows—

" It's bill, and the skin that covers it's basis, is black: the edges of the upper mandible have angles. It has a small space of bare skin round the eyes. The head and neck are green; and on the crown of the head is a round spot, of a fine blue or sapphire colour. On the lower part of the neck, behind, is an orange-coloured crescent, which divides the neck

neck from the back, which is green. The wings, breast, belly, thighs, covert-feathers under the tail, and the tail itself, are also green. The quills are dusky at their tips, both without and within; the inner webs of the quills are of a sky blue; and the covert-feathers of the wings, within, are light green. The throat is of a fine red or sanguine colour; as are the rump, and covert-feathers of the tail. On the middle of the back is a spot of yellow. The legs and feet, which are formed as in other birds of the Parrot-species, are of a black or dusky colour. The tail is composed of twelve feathers, of equal length: it is blue-ish on it's under side, and is almost hid by the red covert-feathers on it's upper side."

Buffon describes this bird more generally, under the name of the Blue-Headed Parroquet. "The crown of the head," says he, "is of a fine blue; and round the neck is an orange half-collar: the breast, and rump, are red; and the rest of the plumage is green. Edwards says, that he received this bird from Sumatra; Sonnerat found it in the Island of Luçon. This," adds Buffon, "is one of the species that sleep with

with the head hanging downwards. It lives on Callou ; a kind of white liquor, which is obtained, in the East Indies, from the Cocoa Tree, by making an incision near the foot stalks which support the fruit. A hollow bamboo is fixed to the extremity of the branch, to collect the sap ; which, when first drawn, is pleasant, and resembles the taste of new cyder. It appeared to us," concludes Buffon, " that we ought to refer to the same species the bird mentioned by Aldrovandus ; of which, the crown of the head was a fine blue, the rump red, and the rest of the plumage green : but, as that naturalist does not take notice of the half-collar, or of the red on the breast ; and also says, that it came from Malacca ; it was, perhaps, of a different though closely related species."

This bird, which is the *Psittacus Galgulus* of Linnæus, is confounded with the *Psittacus Galgulus Philippensis*, called by Buffon the *Coulicassi*, and by Latham the Philippine Parroquet. They appear to be varieties of the same species : both inhabiting the Philippine Islands, and being of the same size.

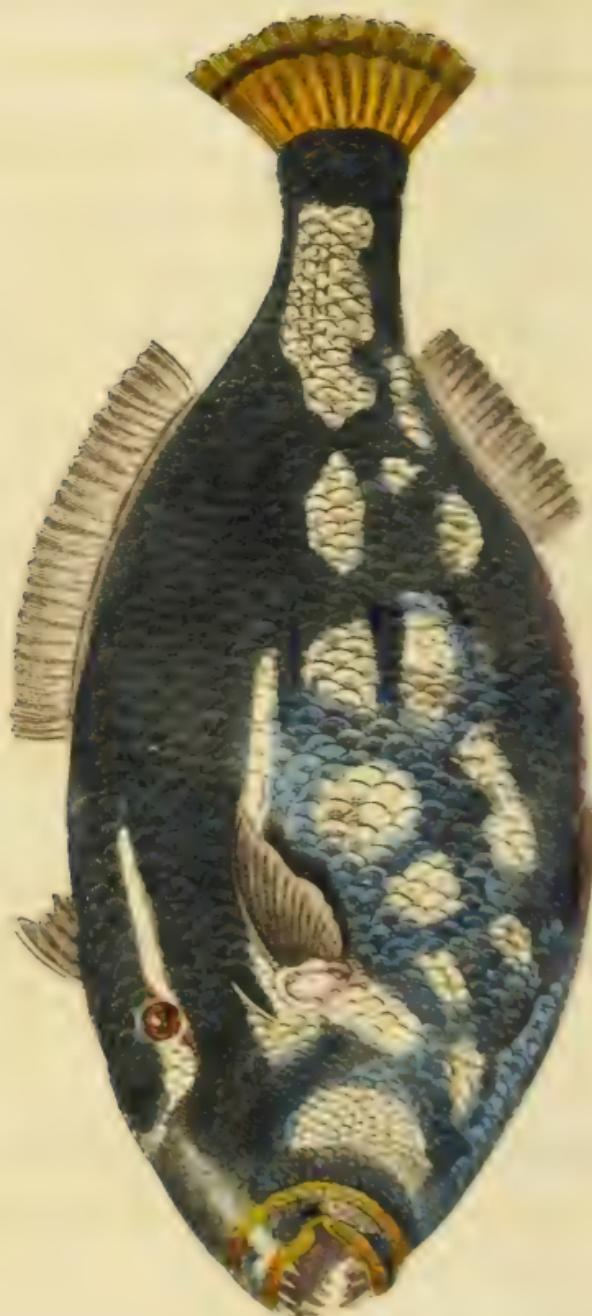
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The Sapphire-Crowned Parroquet is scarcely five inches long ; and, sometimes, much smaller. It sleeps suspended to the branch of a tree by one foot. This appears to have been a Cock Bird : for, in the Female, the red colour of the throat, and the blue colour of the crown, are both wanting ; those parts being of the general green colour of the body.

Buffon, in his account of the Coulicassi, which is the native name of the *Psittacus Galgulus Philippensis*, or Philippine Parroquet of Latham, accuses Brisson and Linnæus of having confounded it with Edwards's Sapphire-Crowned Parroquet. But, from the description given by Buffon himself of his Coulicassi, it appears quite as much to resemble Edwards's Sapphire-Crowned Parroquet, as the Blue-headed Parroquet to which he insists that it must be alone referred.



SPOTTED GUAPIRVA.



SPOTTED GUAPERVA.

THE name Guaperva is given to a genus of curious and beautiful Brasilian fishes, consisting of twelve species. They are common in the ports of the Isles of France and Bourbon; and are said to be fatal to those who eat them at certain seasons. They are classed, by some naturalists, among the *Rana Piscatrix* kind; but greatly differ, in essentials, from that singular fish. Artedi places them in the rank of the *Branchiostegi Pisces*; that is, of such fish as have the gills concealed. In the system of Linnæus, the Guaperva is the genus *Chætodon*.

The Guaperva Maculata, or Spotted Guaperva, which is the fish represented in the annexed print, is usually about a foot long. The general colour is a blueish black, spotted with white on the lower parts of the body. Towards the eyes there is a white band, forming a bow, the ends of which approach each other near the jaws. There are, also, near this last part, two bands of a golden yellow colour.

The

SPOTTED GUAPERVA.

The dorsal and anal fins, are grey: that of the tail resembles orpiment or yellow arsenic. There is, on the tail, a little before it's extremity, a black band, which is transversely intersected at the centre of another. The first dorsal fin is composed of three spinous rays united by a membrane; the second has twenty-six rays, which are bony and ramified; and the anal fin has twenty-two similar rays. The pectoral fin has fourteen rays, and the tail twelve.

It is remarked, that the more the red colour of the teeth of this fish approaches a red brown, the more fatal are the dreadful effects which it has on those who eat it.

This fish is commonly covered with a viscous humour, which renders it brilliant, and heightens it's natural colour.





BOBAK.

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BOBAK.

OF this animal, which is the *Arctomys* *Bobac* of Linnæus, we have a good description collected by Pennant. It is a species of the Marmot; and the name Bobak, is it's Polish appellation. Rzaczinski calls it Bobak Switch; and, in Purchas's Travels of Rubruquis, it is named Sogur: it is the *Arctomys*, of Pallas; and the Bobak, of Forster, Buffon, Pennant, and others.

It has small oval thick ears, covered with greyish white down, and having longish hairs on the edges. The eyes are small, and the whiskers are short. The colour about the eyes and nose is a dusky brown; among the whiskers it is ferruginous: the upper part of the body is greyish, intermixed with long black or dusky hairs, tipped with grey; the throat is rust-coloured; and the rest of the body, as well as the insides of the limbs, is of a yellowish rust-colour. The colour, however, seems by no means constantly alike: for, according to Buffon, who often speaks

too generally, the colour is a pale yellow ; Pallas, with better discrimination, describes the upper parts of the body as grey, and the under parts yellowish ; while Brisson—who calls it the *Glis Marimotta Polonica*, or Polish Marmot—tells us, that it is of a yellowish colour, with a reddish head. It has four toes on the fore feet, with a short thumb having a strong claw : there are five toes behind. The tail is short, slender, and full of hair. The length of this animal, from the nose to the tail, is sixteen inches ; the trunk of the tail is about four inches, and the hairs extend an inch beyond the end of the trunk.

These animals inhabit the high but milder and sunny sides of mountainous countries, which abound with fissile or free-stone rocks. They seek dry situations ; and such as are full of springs, woods, or sand. They are found in Poland ; and, in the South of Russia, among the Carpathian Hills. They swarm in the Ukraine, about the Boristhenes ; especially, between the Sula and the Supoy : and, again, between the Boristhenes and the Don, and along the range of hills which extend to the Volga.

Volga. They are seen about the Yaik, and other neighbouring rivers. In Great Tartary, they inhabit the Southern Desart, and the Altaic Mountains East of the Irtis. They cease to appear in Siberia, on account of it's northern situation: but are found, again, beyond Lake Baikal, and about the River Argun, and the Lake Dalay; in the sunny mountains about the Lena; and very commonly in Kamtschatka, though they rarely reach as high as latitude fifty-five.

They burrow extremely deep, and obliquely, to the depth of two, three, and even four yards: forming numerous galleries, with one common entrance from the surface; and each gallery ending in the nest of the inhabitant. Sometimes, the burrows consist of only one passage. They are found in great abundance about the sepulchral tumuli, as they penetrate with great facility in the soft dry earth: but they are, also, very common in the rocky strata; and, in the mineral part of the Urallian Chain, often direct the miners to the veins of copper, by the fragments which appear at the mouth of their holes, flung out in the course

course of their labours. In very hard and rocky places, from twenty to forty of these animals join together to facilitate the work; and live in society, each having it's nest at the end of it's respective gallery: but the fewest galleries are found in the softest ground; and, very frequently, there is only a single one. In each nest, they collect the finest hay; and in such plenty, especially towards autumn, that sufficient is found in a single nest for a night's food for a horse.

During the middle and sunny part of the day, they sport about the entrance of their holes, but seldom go far from them. On the sight of man, they retire with a slow pace; and, sitting upright near the mouth, give a frequent whistle, listening at the approach. In places where they live in large families, they always station a sentinel to apprise them of any danger during the time they are feeding.

They are very fond of olleraceous plants; and, in a state of confinement, eat cabbage, and bread, very greedily. They drink milk with much eagerness; but refuse water, and seem

seem never affected with thirst. They are mild, and good-natured: in a wild state, they never quarrel about their food; and when confined, and placed with others caught in distant parts, and strangers to them, they grow instantly familiar. When taken in full age, they very soon become tame; but the young are immediately familiar.

The number produced at a birth, is not with certainty known: but, Mr. Pennant thinks, it is, probably, sometimes eight; the females being furnished with that number of teats. They breed early; for, in June, the young are observed to be half the size of the old.

During the winter, they remain torpid: except such as are kept tame in the stove-warmed rooms of the country; and, even then, finding a defect of that warmth which the snug nest of their subterraneous retreat would afford, they creep, in cold nights, for shelter, into the very beds of the inhabitants. At this period, they will not absolutely refuse food; but eat very little, and that not without apparent disgust: nature allotting for them, in the wild state,

state, a long sleep and cessation from food, the result of plenitude previous to it's commencement. They sometimes escape from confinement, find a retreat, and enjoy their winter's sleep: after which, they return to their owner in the spring; but, usually, with a considerable diminution of their former gentle manners.

These animals attain to excessive fatness, and their fat is much employed in dressing and softening leather and fur. The skins are used by the Koreki, the people of Jakutks, and the Russians, for cloathing. The Calmucks take them in small nets, with large meshes, placed before their holes. The inhabitants of the Ukraine catch them in May or June, by pouring water into the holes, which forces them into the nets. In South Russia, they are destroyed by means of a log of wood with a weight at top; the end being directed into a wooden box placed at the mouth of the hole, which falls as soon as the animal comes out, and confines it by the weight. Their flesh tastes like that of a Hare, but is very rank. The Calmucks are exceedingly fond of these animals

animals when they are very fat, and even consider them as medicinal : the Mahometan Tartars, on the contrary, not only abstain from their flesh, but even afford them protection from injury ; so that, near these hordes, they are prodigiously numerous. These Tartars, indeed, esteem a warren of Bobaks near them to be very fortunate ; and think it a sin to kill either a Bobak, a Swallow, or a Dove.

In Chinese Tartary, the Bobaks are cultivators of Rhubarb : it grows among their burrows ; the manure which they leave about the roots contributes to its increase ; and the loose soil they fling up, proves a bed for the ripe seed, which would, if scattered among the long grass, soon perish, without ever being able to reach the ground.

Buffon says, that “ the Hamster has been called the Strasburgh Marmot, and the Bobak the Polish Marmot. But it is equally certain, that the Hamster is not a Marmot ; as it is probable, that the Bobak does belong to that species : for the Bobak differs from the Alpine Marmot only in the colour of his hair ; which, instead

instead of brown, is a pale yellow. He has, also, a thumb; or, rather, a claw, on the fore-feet; while the Hamster has only four toes, and no thumb. In every other article, the resemblance is perfect: from which it is to be presumed, that these two animals are not distinct species. The same observation applies to the Monac, or Marmot of Canada; which, by some travellers, has been called the Whistler. He seems to differ from the Marmot only by the tail; which is longer, and more bushy. Hence, the Monac of Canada, the Bobak of Poland, and the Alpine Marmot, appear to be the same animal; which, from the influence of different climates, has undergone the varieties formerly mentioned."

On this account of Buffon, which includes all that he has said relative to the Bobak, we may remark, that he and Brisson are the only writers who have said, that the general colour of this animal is a pale yellow. The under parts, indeed, are yellowish; but the upper parts are universally described to be chiefly grey.





CROSS-BILL.

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CROSS-BILL.

"THE Cross-Bill," says Buffon, "is distinguished only by a sort of deformity in it's bill; a character, or rather a defect, which belongs to it alone of all the winged tribe. What proves that it is a defect—an error of nature, rather than a permanent feature—is, that it is variable: the bill in some subjects crosses to the left, in others to the right; but the productions of nature are regular in their development, and uniform in their arrangement. I should therefore impute this difference of position to the way in which the bird has used it's bill, according as it has been more accustomed to employ the one side or the other to lay hold of it's food: the same takes place in men; who, from habit, prefer the right hand to the left. Each mandible of the Cross-Bill is affected by an exuberance of growth; so that, in time, the two points are parted asunder, and the bird can take it's food only by the side: and hence, if it oftener uses the left, the bill will protrude to the right, and vice versa. But

every

every thing has it's utility ; and each sentient being learns to draw advantage even from it's defects. This bill, hooked upwards and downwards, and bent in opposite directions, seems to have been formed for the purpose of detaching the scales of fir-cones, and obtaining the seeds lodged beneath, which constitute the principal food of the bird. It raises each scale with it's lower mandible, and breaks it off with the upper. This bill also assists it's owner in climbing ; and, when caged, it dexterously mounts from the lower to the upper bars. It's mode of scrambling, and the beauty of it's colours, have occasioned it to be called, by some, the German Parrot. The Cross-Bill inhabits only the cold climates, or the mountains in temperate countries. It is found in Sweden, in Poland, in Germany, in Switzerland, and among the Alps and Pyrenees. It is quite stationary in countries where it lives the whole year : but, sometimes, it accidentally appears in large flocks, in other regions. In 1756, and 1757, great numbers were seen in the neighbourhood of London. They do not arrive at stated seasons, but seem to be rather directed by chance, and many years pass without

without their being at all observed. The Nut-Crackers, and some other birds, are subject to the same irregular migrations, which occur only once in twenty or thirty years. We might presume, that the species of the Cross-Bill, which prefers the cold climates, would be found in the north of the New Continent, as in that of the Old: yet no traveller to America has taken notice of it. But, besides the general presumption, which is verified by analogy, there is a fact which seems to prove our opinion: the Cross-Bill is found in Greenland, from whence it was brought to Edwards by the Whale Fishers; and that naturalist, who was better acquainted than any person with the nature of birds, properly remarks, that both the land and the water sort which inhabit the Arctic regions, appear indifferently in the North of America, and of Europe.

“ The Cross-Bill is one of those birds, the colours of which are most subject to vary; among a great number, we can scarcely find two individuals that are exactly similar. Not only are the shades of the plumage different; but the positions of the colours change with
the

the season and the age. Edwards, who examined a prodigious number, and sought to mark the limits of variation, paints the Male with a rose-colour, and the Female with a yellowish green : but, in both, the bill, the eyes, the thighs, and the legs, are precisely the same, with regard to shape and colours. Gesner tells us, that he kept one of these birds, which was blackish in September, and assumed a red colour in October. He adds, that the parts where the red began to appear, were the under-side of the neck, the breast, and the belly ; that this red afterwards became yellow ; that winter, especially, is the season when these changes take place ; and that, at different times, it is said, that they receive a red, yellow, green, and cinereous cast. We must not, therefore, with our modern nomenclators, reckon as a separate species, or a particular variety, a Greenish Cross-Bill—the *Loxia Pyrenaica* of Barrere, and the *Loxia Rufescens* of Brisson—found in the Pyrenees: since it occurs, equally, in other places ; and, in certain seasons, it has in all countries that colour. According to Friesch, who was perfectly acquainted with these birds, which are common

CROSS-BILL.

in Germany, the colour of the adult Male is reddish, or green mixed with red: but they lose this red, like the Linnets, when they are kept in the cage; and only retain the green, which is more deeply impressed both in the young and in the old. For this reason, they are called, in some parts of Germany, Krinis, or Grünitz; that is, the Greenish Bird. The two extreme colours, therefore, have not been well chosen by Edwards: we must not infer, as his figures would suggest, that the Male is red, and the Female green; there is every reason to believe that, in the same season, and at the same age, the Female differs from the Male only in the greater faintness of the colours."

Our annexed figure is copied from the Cock Cross-Bill of Edwards, above alluded to by Buffon. These birds, build as early as January: they place their nests under the large branches of the Pine; fixing them with the resin of that tree, and so besmeareding them with this substance, that the melted snow, or rains, cannot penetrate. In the young, the corners of the bill are yellow, and they hold it constantly open as long as they are fed by the mother.

We

We are not told, how many eggs they lay ; but we may presume, from their size, and their resemblance to the Grosbeak, that the number is four or five, and that they hatch only once a year.

This curious bird is the *Loxia*, of Gesner, Aldrovandus, and Brisson ; the *Loxia Curvirostra*, of Linnæus and Gmelin ; the *Shell-Apple*, of Willughby ; and the *Cross-Bill* of Edwards, Buffon, and most other naturalists. In Germany, it is called *Kreutz-Schnabel*, and *Kreutz-Vogel* ; in Poland, *Rzywonox* ; and, in Sweden, *Korsnaef*, and *Kiaegelefifware*. It has the same size, figure, and instincts, as the Grosbeak ; and so nearly are they conceived, by Frisch, to be allied, that he is of opinion they would breed together. Willughby says, that the Cross-Bill weighs an ounce and a half ; but Edwards assures us, that one which he kept alive in a cage weighed two ounces and a sixteenth. In summer, during which season it is mute, the flesh is said to be good eating. Its feeble notes are only heard in winter. Like the Grosbeak, it is stupid, inactive, and secure, and falls an easy victim to all the birds of prey.





MALABAR TIGER SHELL.

Published August 1st, 1861, by H. Colton, 110, High Street, Boston.

MALABAR TIGER SHELL.

THE name of the Malabar Tiger, we have selected from Knorr, with his fine figure of this shell. We say, selected; because he gives us no less than three synonimes: these are, the Giant's Ear, the Tiger of Malabar, and the Speckled Snake. The latter name, however, is more particularly applied to a smaller variety of this species; which he has afterwards figured, and which is very differently marked.

Of the present Shell, his description is as follows—" It is," he says, " of the very numerous class of Alykruiken; or Cruches à Huile—that is, of Oil Jars, or Tuns—as they are denominated; and which belong to the Escargots, or Snails, properly so called. The Malabar Tiger is named, by some, the Giant's Brilliant Ear, or the Skin of the Speckled Snake. It is a very thick shell; having the aperture in the form of an ear, and covered with the lustre of Mother of Pearl. This lustre pervades, also, the sides of the whirls, where there is a ground in itself brilliant, and as black as ebony. This black colour loses itself in the upper spires, and all the superior parts

parts appear to be of Mother-of-Pearl. This same species of shell has, also, sometimes, instead of the vivid lustre, only white spots or stripes; on which account, that is called the Skin of the Snake, and this the Tiger. But they are alike in one particular: that is, both have, near the aperture, an umbilical hole sufficiently capacious; which ascends to the last small whirl, where it becomes so exceedingly minute, as barely to admit the introduction of a pin's point."

To this account, from Knorr, we may be permitted to add, that the Malabar Tiger is a shell in the family of the Globosæ, or Tuns, as they are called by English conchologists: and which are defined, by Da Costa, to be Shells most generally of a somewhat globose shape, the body being greatly swelled or rounded; having short turbans; and a mouth extremely pabulous, or wide, and very large, the upper part ending in a wry channel, like a Soal's mouth, which is very short, and turns backwards. None have a pillar or columella lip; though, in some, as the Persian Crowns, and Melons, the columella or pillar itself is wrinkled or pleated.





ANGORA CAT.

Catulus domesticus Angoraeus planus (L.) *Waldst. Sebae*

ANGORA CAT.

LITTLE is the information which we possess, respecting this beautiful variety of the feline race. It is the *Felis Catus Angorensis*, of Linnæus; and the Angora Cat, of Schreber, Brisson, Buffon, Pennant, and other naturalists.

It is described by Pennant, as a variety of the Common Cat; having long hair, of a silvery whiteness and silky texture. About the neck, especially, he observes, it is particularly long, and forms a fine ruff: the hairs on the tail, too, are very long and spreading. "It is," continues Pennant, "a large variety, found about Angora; the same country as produces the fine-haired Goat. It degenerates, after the first generation, in our climates. A variety of this kind is found in China, with pendent ears; of which the Chinese are very fond, and ornament their necks with silver collars. They are cruel enemies to Rats. Perhaps," concludes he, "they are the domestic animals which the Chinese call Sumxi."

To

ANGORA CAT.

To this, which is the entire account of the Angora Cat, as given by Pennant; we shall add what has been incidentally said by Buffon, who does not afford it any particular description.

After mentioning, under the general article Cat, that M. Kolbe says, there is, at the Cape of Good Hope, a wild kind, of a blue colour, Buffon thus proceeds—“ These Blue, or rather Slate-Coloured Cats, are also found in Asia. ‘ In Persia,’ says Pietro della Valle, ‘ there is a species of Cats, which properly belong to the Province of Chorazan. Their figure and size are the same with those of the Common Cat. Their beauty consists in the colour of their hair: which is grey, and uniformly the same over the whole body: except that it is darker on the back and head, and clearer on the breast and belly, where it approaches to whiteness; with that agreeable mixture of clare-obscur, to use the language of painters, which has always a wonderful effect. Besides, the hair is fine; shining; soft as silk; and so long that, though not frizzled, it forms ringlets in some parts, and particularly under the throat.

These

These Cats are, among other Cats, what the Water Dog is among other Dogs. The most beautiful part of the body is the tail; which is very long, and covered with hair five or six inches in length; they extend and turn it on their backs, like the Squirrel, the point resembling a plume of feathers. They are very tame, and the Portuguese have brought them from Persia into India.' The same author adds, that he had four couple of these Cats, which he intended to bring to Italy. From this description," remarks Buffon, "it appears that the Persian Cats resemble, in colour, those we call Chartreux Cats; and that, except in colour, they have a perfect resemblance to the Cats of Angora. It is probable, therefore, that the Cat of Chorazan in Persia, the Cat of Angora in Syria, and the Chartreux Cat, constitute but one race, whose beauty proceeds from the particular influence of the climate; as the Spanish Cats, which are red, black, and white, owe their beauty to the climate of Spain. It may be remarked, in general, that of all the climates on the habitable parts of the globe, those of Spain and Syria are most favourable to the productions

productions of beautiful varieties in natural objects. In Spain, and in Syria, the Sheep, the Goats, the Dogs, the Cats, the Rabbits, &c. have the finest wool, the most beautiful and longest hair, and the most agreeable and variegated colours. These climates, it should appear, soften nature, and embellish the form of all animals. The Wild Cat, like most other animals in a savage state, has coarse colours, and hard hair: but, when rendered domestic, the hair softens; the colours vary; and, in the favourable climates of Chorazan, and Syria, the hair grows long, fine, and bushy, all the colours become more delicate, the black and red change into a shining brown, and the greyish brown is converted into an ash-coloured grey. By comparing the Wild Cat with the Chartreux Cat, it will be found, that they differ only in this degradation in the shades of colour. As these animals have always more or less whiteness on their sides and belly, it is apparent that, to produce Cats entirely white, and with long hair, like the Cats of Angora, nothing farther is requisite, than to join those which have the greatest quantity of white; as has been done to pro-

cure

ANGORA CAT.

cure White Rabbits, Dogs, Goats, Stags, &c. In the Spanish Cat, which is only another variety of the wild kind, the colours, instead of being weakened by uniform shades, as in the Cat of Angora, are exalted, and have become more lively and brilliant; the yellow is changed into red, the brown into black, and the grey into white. These Cats, though transported into America, have not degenerated, but preserve their beautiful colours. In general, Cats are not subject, like Dogs, to degeneration, when transported into warm climates."

Buffon concludes his general account of the Cat, with the following observations—"The climate of Spain and Syria have alone produced permanent varieties: to these may be added, the climate of Pe-chi-ly in China; where the Cats have long hair, and pendulous ears, and are the favourites of the ladies. These domestic Cats with pendulous ears, of which we have full descriptions, are still farther removed from the wild and primitive race, than those whose ears are erect."

In his Supplement to the article Cat, Buffon says—I formerly remarked that, in China, there were Cats with pendulous ears. This variety is not found anywhere else: and, perhaps, it is an animal of a different species; for travellers, when mentioning an animal called Sumxu, which is entirely domestic, say that they can compare it with nothing but the Cat, with which it has a great resemblance. Its colour is black or yellow, and its hair very bright and glittering. The Chinese put silver collars about the necks of these animals, and render them extremely familiar. As they are not common, they gain a high price; both on account of their beauty, and because they destroy Rats.'

From this description, by Buffon, of the Sunxu, or Sumxi, we cannot infer, with Pennant, that it is a variety of the Angora Cat.





AMERICAN GOLDFINCH.

Engraved by Harrison Weir, F. J. H. Illustrator

AMERICAN GOLDFINCH.

THIS bird is the *Fringilla Tristis*, of Linnæus; the *Carduelis Americana*, of Klein and Brisson; and the American Goldfinch, of Catesby, Edwards, Pennant, and Latham. Buffon, however, after observing that all those who have mentioned the bird give it the appellation of the American Goldfinch, remarks that the term would not be proper till it were ascertained that no other Goldfinch existed in the New World: and this supposition, he adds, is not only improbable, but absolutely false; for the Green Goldfinch, or Maracaxao, which is the *Fringilla Melba* of Linnæus, and the *Carduelis Viridis* of Brisson, is a native of Brasil. He has, therefore, adopted another name, which characterizes its plumage; and calls it the Chardonneret Jaune, or Yellow Goldfinch: a name of which we cannot altogether disapprove, though we have not thought it necessary to adopt it; having taken the name, with the figure, of Edwards, who etched it on the plate immediately from the living bird.

“ The

AMERICAN GOLDFINCH.

"The bill," says Edwards, "is much like that of our Goldfinch in shape, and also in being of a light flesh colour. The forehead is covered with black feathers; the rest of the head, neck, breast, and back, are covered with bright yellow feathers. The thighs, lower belly, and covert-feathers both above and beneath the tail, are of a yellowish white. The lesser covert-feathers of the wings are yellow without, and whitish within; the rest of the wing feathers are black: but the first and second rows of coverts have white tips a little shaded with brown; and part of the quills also, next the back, have light tips and borders. The tail has twelve feathers, pretty equal in length, and of a black colour: the inner webs of the outer feathers are white toward their tips; and the insides of the quills, and under side of the tail, are of a dark ash colour. The legs and feet are of a flesh colour."

This is Edwards's description of the Cock American Goldfinch. "The Hen," he tells us, "has the bill and legs coloured as in the Cock. She wants the black spot on the head; the top of the head, neck and back, are of an olive

olive green; the throat, breast, and rump, are of a pale yellow; the lower belly, and covert-feathers beneath the tail, are white; the wings and tail are like those of the Cock, only the black is more dusky, and the light more brownish; and both quills and covert-feathers, within-side the wings, are of an ash colour. The Cock, when young, differs nothing from the Hen, except in having the black spot on the head.

"These birds," adds Edwards, who possessed and figured both the Cock and the Hen, "were brought from New York, in North America. I kept the Hen in a cage separate from the Cock; and, in August 1755, she layed one small pearl-coloured egg without any spots. The Hen moulted or changed her feathers twice a year while I kept her; viz. in March and September: and, in the winter months, her body was wholly brown; but the head, wings, and tail, were of the same colour as they were in summer. The Cock dying soon after I had him, I could not tell whether he moulted in the same manner, or not; though I apprehend it is common to them both.

The

The All-wise Creator probably intended to cloath them constantly with a colouring like that of the shrubs and trees where they inhabit; the better to hide and preserve them from voracious birds of prey, and other animals that feed on birds."

On the uncommon circumstance of this bird's moulting twice a year, Buffon agrees with Edwards, that the Cock would probably have done the same; and, he adds, in that respect resembles the Bengals, the Widow Birds, and many other natives of warm climates. "In the subject observed by Brisson," continues Buffon, "the belly, the loins, the inferior coverts of the tail and of the wings, were of the same yellow with the rest of the body; the superior coverts of the tail were white-grey; and the bill, the legs, and the nails, were white: but most of these differences may be owing to the different states in which the bird has been examined. Edwards drew it from the life; and his specimen appears, besides, to have been larger than that of Brisson. Catesby tells us, that it is very rare in Carolina, more frequent in Virginia, and very common in New York.

The

The one figured in the Planches Enluminées, was brought from Canada, where Father Charlevoix saw several of that species.

From the above account, by Buffon, it suggests itself to us, that this bird might have been as well called the North American Goldfinch: and, perhaps, the Green Goldfinch, would not be improperly denominated the South American Goldfinch. But, as we have repeatedly asserted, we feel not the smallest desire to give new names to objects which already possess received appellations.

As our figure is considerably reduced from that of Edwards, which was represented of the natural size, it may not be improper to add the measures of this bird, with which Buffon closes his description.

“ The total length is four inches and one third; the bill is five or six lines; the tarsus is the same; the alar extent is seven lines and one fourth; and the tail is eighteen lines, consisting of twelve equal quills, and stretching six lines beyond the wings.”

The

AMERICAN GOLDFINCH.

The American Goldfinch, like that of Europe, feeds chiefly on the seeds of the Thistle: whence the French appellation, Chardonneret; from Chardon, a Thistle. In a note to Buffon, it is remarked, that this species includes a variety, which he afterwards describes under the name of the New York Siskin.



BLACK WHALE-NOSED CACHALOT.

Published, New York, November, 1858. 1st. Mrs. May.



BLACK BLUNT-NOSED CACHALOT.

THE Cachalots were generally described by the name of Spermaceti Whales; till Pennant very properly distinguished them, by borrowing the present name from the French. The Cachalot, which has several teeth in the lower jaw, but none in the upper, is the *Physeter* of Linnæus. Of this genus, there are four species: 1. the *Physeter Catodon*, or Lesser Cachalot; 2. the *Physeter Macrocephalus*, or Blunt-Nosed Cachalot; 3 the *Physeter Microps*, or Sharp-Nosed Cachalot; and, 4. the *Physeter Tursio*, or High-Finned Cachalot. In the *Systema Naturæ*, there are three known varieties enumerated of the Blunt-Nosed Cachalot, and two of the Sharp-Nosed. The former are, 1. the Black Blunt-Nosed Cachalot; 2. the White Blunt-Nosed Cachalot; and, 3. the Grey Blunt-Nosed Cachalot: the latter consists of, 1. the Hook-Toothed Sharp-Nosed Cachalot; and, 2. the Straight-Toothed Sharp-Nosed Cachalot.

The Black Blunt-Nosed Cachalot, which we have figured, is the *Physeter Macrocephalus Niger*, of Linnæus; the *Cetus*, or *Whale*, with

with two fins of a black colour on the back, and whitish on the belly, with the spiracle on the neck, of Brisson; the Cete, or Whale, named Pot-Wallfish, of the Dutch; the *Balæna Major Macrocephala*, of Ray; the *Balæna*, of Johnston and of Willughby; the *Cete Admirabile*, of Clusius; the *Cetus Dentatus*, of Charleton, and Sibbald; the Cachetot, of Klein; and the *Spermaceti Whale*, of Brown. The specific character of the Blunt-Nosed Cachalot is, that it has no fin on the back, and that the blowing pipe is situated on the nape of the neck: the Black Variety is described to be of a black colour, with a hump on the back; the White Variety, or *Physeter Macrocephalus Albicans*, is of a whitish colour, with a smoothish back; and the Grey Variety, or *Physeter Macrocephalus Cinereus*, is of a blackish ash-colour, with a hump on the back. The Black Blunt-Nosed Cachalot is found in the European Seas, the White in Davis's Straits, and the Grey on the Coasts of New England.

The size of the Black Blunt-Nosed Cachalot is more than sixty feet long, and thirty-six feet in circumference. The head is exceedingly thick;

thick ; and the lower jaw, which is smaller than the upper, has forty-six teeth, in two rows, which rise between two and three inches above the gums, and are received into an equal number of hollows, or sockets, in the upper jaw, when the mouth is shut.

The White Blunt-Nosed Cachalot resembles the Common Whale, but has the head of a sharper form. It is about fifteen or sixteen feet long, and of a yellowish white colour: the teeth are compressed, somewhat crooked inwards, and rounded at the ends.

The Grey Blunt-Nosed Cachalot grows to sixty and even seventy feet long, by thirty or forty in circumference. It has a very large head, with very small eyes. The lower jaw is much narrower than the upper, and is furnished with a considerable number of teeth, which are received into sockets of the upper jaw when the mouth is shut. This variety agrees with the first, in having a hump on the back, which rises about a foot above the general surface.

The Cachalot, in consequence of being more slender, is far more active than the Common

mon Whale. The tongue is small; but the throat is so capacious, that it would with great ease admit an ox. It is as destructive among lesser fishes as the whales are inoffensive, and can at one gulp swallow a whole shoal of fishes down its enormous gullet. Spermaceti, and Ambergris, are both produced from the Cachalot. The former is found naturally in the head of the animal; and is, in fact, the brain. The spinal marrow, too, affords no inconsiderable quantity. Indeed, all the oil of this fish is convertible into Spermaceti; by boiling it in pot-ash lees, and hardening it in the manner of soap. "As Ambergris," says Dr. Goldsmith, "is found in the place where the seminal vessels are usually situated in other animals, the name of the former substance seems more justly to belong to this." But Dr. Schwediaur, in the Philosophical Transactions for 1783, says that the perfume called Ambergris, is the hardened fæces, or scybala, ejected by the animal when sick, large quantities having been found in its intestines. The same Gentleman informs us, that the Cachalot feeds chiefly on the Eight-Legged Cuttle-Fish, or Sepia Octopodia.



